



STANLEY
PROTO

WRENCHES AND WRENCH SETS

7

- SETS
- COMBINATION
- BOX END
- OPEN END
- ADJUSTABLE
- STRUCTURAL
- PIPE



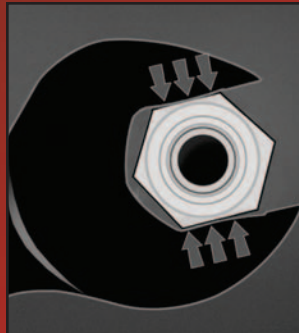
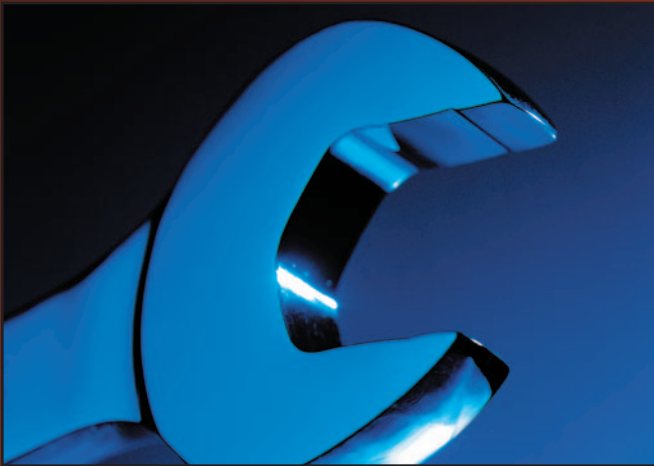
WRENCHES AND WRENCHES SETS

7

Proto was the first hand tool manufacturer to produce and market the combination wrench in the United States. Among the many styles of wrenches produced by Proto are: standard, extra long and short combination, flex-head, open end, angle head, box, deep offset box, ratcheting box, obstruction, adjustable, flare nut, striking, slugging, construction, spanner and pipe. These Proto wrenches incorporate a wide range of both fractional and metric wrench openings, along with satin, high polish, and Protoblack™ black oxide finishes, designed to meet any industrial requirement.

PROTO ANTI-SLIP DESIGN (ASD) WRENCHES

The patented Proto Anti-Slip Design wrench features a locking groove to help prevent slipping. Traditional wrenches often slip, causing fastener damage and knuckle injury. Fastener damage also occurs by concentrating forces at the corners with point-to-point contact. The arched surface of the Proto Anti-Slip Design wrench spreads the force over a 400% larger contact area, to help prolong the fastener life.



PROTO TORQUEPLUS™ WRENCHES

The box end of Proto wrenches incorporates the TorquePlus™ wrenching system. This high performance design allows the wrench to contact the fastener away from the corner while also dispersing the stress over a larger area. It allows up to 15% more torque to be applied to the fastener. Reduces the risk of fastener rounding and provides a better grip on worn, rounded fasteners.

CLIK-STOP® ADJUSTABLE WRENCHES

Our exclusive Clik-Stop® design feature locks the moveable jaw automatically at any opening selected. Release the handle pressure and the knurl turns with ease.

SAFETY

- Use safety goggles. Serious eye injury is possible.
- Pull the wrench toward you. Do not push.
- Do not use extenders or cheater bars.
- Adjust adjustable wrenches tightly.
- Strike striking/slugging wrenches squarely. Do not overblow or underblow.
- Use correct size wrenches. Do not use fractional wrenches on metric fasteners, or vice versa.
- Use the type of wrench that fits the job.
- Use a box type wrench if possible.
- Maintain your balance
- Use a commercial lubricant on a corroded fastener.
- Do not use a damaged wrench. Replace.





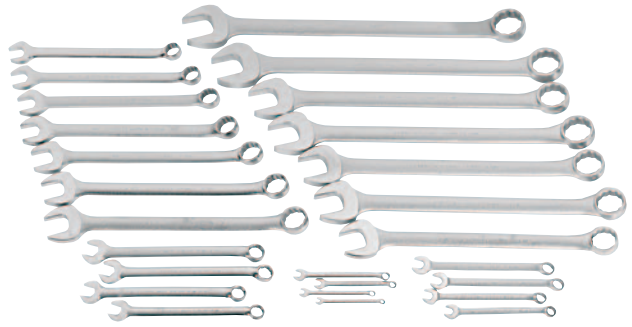
SET NO. 1200-90ASD 31 PC. COMBINATION ASD WRENCH SET—12 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Meets ergonomic criteria.
- Weight: 124 lbs.



Product ID No.	Contents	in.	Length
1200-90ASD	1210A	5/16"	5-3/8"
	1212ASD	3/8"	6"
	1214ASD	7/16"	7"
	1216ASD	1/2"	8"
	1218ASD	9/16"	8-7/8"
	1220ASD	5/8"	9-1/2"
	1222ASD	11/16"	10-1/4"
	1224ASD	3/4"	11"
	1226ASD	13/16"	11-3/8"
	1228ASD	7/8"	12-1/2"
	1230ASD	15/16"	13-1/4"
	1232ASD	1"	14"
	1234ASD	1-1/16"	15-1/4"
	1236ASD	1-1/8"	15-7/8"
	1240ASD	1-1/4"	16-7/8"
	1242	1-5/16"	17-5/8"
	1244	1-3/8"	18-1/2"
	1246	1-7/16"	19-3/8"
	1248	1-1/2"	20-1/4"
	1252	1-5/8"	23"
	1254	1-11/16"	23"
	1256	1-3/4"	25"
	1258	1-13/16"	25"
	1260	1-7/8"	28"
	1264	2"	28"
	1266	2-1/16"	30"
	1268	2-1/8"	30"
	1270	2-3/16"	30"
	1272	2-1/4"	29-1/2"
	1276	2-3/8"	31-1/2"
	1280	2-1/2"	32"
	2413	Tool Roll	

Note: Set No. 1200-90ASD is made up of Set Nos. 1200FASD and 1200FASD-HD.

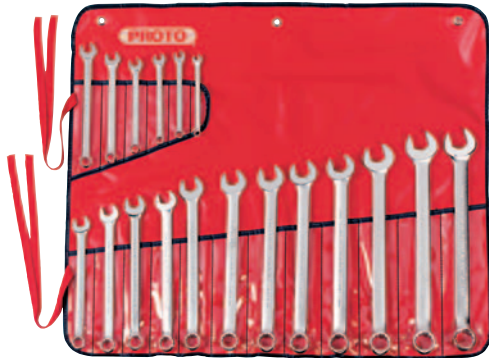


SET NO. 1200-80ASD 26 PC. COMBINATION ASD WRENCH SET—12 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Meets ergonomic criteria.
- Weight: 57.42 lbs.



Product ID No.	Contents	in.	Length
1200-80ASD	1208A	1/4"	4-7/8"
	1210A	5/16"	5-3/8"
	1212ASD	3/8"	6"
	1214ASD	7/16"	7"
	1216ASD	1/2"	8"
	1218ASD	9/16"	8-7/8"
	1220ASD	5/8"	9-1/2"
	1222ASD	11/16"	10-1/4"
	1224ASD	3/4"	11"
	1226ASD	13/16"	11-7/8"
	1228ASD	7/8"	12-1/2"
	1230ASD	15/16"	13-1/4"
	1232ASD	1"	14"
	1234ASD	1-1/16"	15-1/4"
	1236ASD	1-1/8"	15-7/8"
	1240ASD	1-1/4"	16-7/8"
	1242	1-5/16"	17-5/8"
	1244	1-3/8"	18-1/2"
	1246	1-7/16"	19-3/8"
	1248	1-1/2"	20-1/4"
	1252	1-5/8"	23"
	1254	1-11/16"	23"
	1256	1-3/4"	25"
	1258	1-13/16"	25"
	1260	1-7/8"	28"
	1264	2"	28"



SET NO. 1200R-MASD
18 PC. METRIC COMBINATION
ASD WRENCH SET—12 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 6.51 lbs.



Product ID No.	Contents	mm	Length
1200R-MASD	1207MA	7	131.1
	1208MA	8	137.4
	1209MA	9	143.8
	1210MASD	10	150.1
	1211MASD	11	175.5
	1212MASD	12	195.8
	1213MASD	13	200.9
	1214MASD	14	223.8
	1215MASD	15	232.4
	1216MASD	16	242.4
	1217MASD	17	261.3
	1218MASD	18	271.3
	1219MASD	19	280.2
	1220MASD	20	290.2
	1221MASD	21	300.2
	1222MASD	22	318.1
	1223MASD	23	328.1
	1224MASD	24	338.0
	2438	Tool Roll	

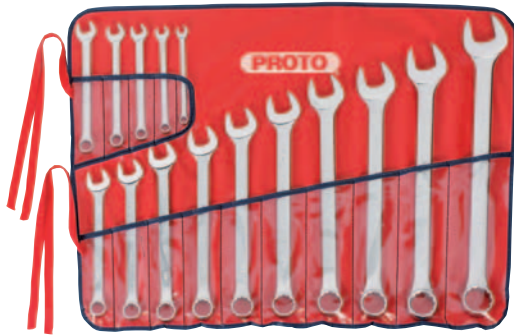


SET NO. 1200F-HD
16 PC. COMBINATION WRENCH SET—12 POINT

- Satin finish.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 11.3 lbs.



Product ID No.	Contents	in.	Length
1200F-HD	1242	1-5/16"	17-5/8"
	1244	1-3/8"	18-1/2"
	1246	1-7/16"	19-3/8"
	1248	1-1/2"	20-1/4"
	1252	1-5/8"	23"
	1254	1-11/16"	23"
	1256	1-3/4"	25"
	1258	1-13/16"	25"
	1260	1-7/8"	28"
	1264	2"	28"
	1266	2-1/16"	30"
	1268	2-1/8"	30"
	1270	2-3/16"	30"
	1272	2-1/4"	30"
	1276	2-3/8"	32"
	1280	2-1/2"	32"



SET NO. 1200FASD 15 PC. COMBINATION ASD WRENCH SET—12 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Meets ergonomic criteria.
- Weight: 9.75 lbs.



Product ID No.	Contents	in.	Length
1200FASD	1210A	5/16"	5-3/8"
	1212ASD	3/8"	6"
	1214ASD	7/16"	7"
	1216ASD	1/2"	8"
	1218ASD	9/16"	8-7/8"
	1220ASD	5/8"	9-1/2"
	1222ASD	11/16"	10-1/4"
	1224ASD	3/4"	11"
	1226ASD	13/16"	11-7/8"
	1228ASD	7/8"	12-1/2"
	1230ASD	15/16"	13-1/4"
	1232ASD	1"	14"
	1234ASD	1-1/16"	15-1/4"
	1236ASD	1-1/8"	15-7/8"
	1240ASD	1-1/4"	16-7/8"
2413	Tool Roll		



SET NO. 1200F-MASD 15 PC. **METRIC** COMBINATION ASD WRENCH SET—12 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 4.25 lbs.



Product ID No.	Contents	mm	Length
1200F-MASD	1207MA	7	131.1
	1208MA	8	137.4
	1209MA	9	143.8
	1210MASD	10	150.1
	1211MASD	11	175.5
	1212MASD	12	195.8
	1213MASD	13	200.9
	1214MASD	14	223.8
	1215MASD	15	232.4
	1216MASD	16	242.4
	1217MASD	17	261.3
	1218MASD	18	271.3
	1219MASD	19	280.2
	1220MASD	20	290.2
	1221MASD	21	300.2
2441	Tool Roll		



**SET NO. 1200P-MASD
15 PC. METRIC COMBINATION
ASD WRENCH SET—12 POINT**

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 10.87 lbs



Product ID No.	Contents	mm	Length
1200P-MASD	1207MA	7	131.1
	1208MA	8	137.4
	1210MA	10	150.1
	1212MASD	12	195.8
	1214MASD	14	223.8
	1216MASD	16	242.4
	1218MASD	18	271.3
	1220MASD	20	290.2
	1222MASD	22	318.1
	1224MASD	24	338.0
	1226MASD	26	372.0
	1228MASD	28	394.5
	1229MASD	29	402.9
	1230MASD	30	402.9
1232MASD	32	429.7	
2413	Tool Roll		



**SET NO. 1200GASD
10 PC. COMBINATION
ASD WRENCH SET—12 POINT**

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Meets ergonomic criteria.
- Weight: 4.88 lbs.



Product ID No.	Contents	in.	Length
1200GASD	1214ASD	7/16"	7"
	1216ASD	1/2"	8"
	1218ASD	9/16"	8-7/8"
	1220ASD	5/8"	9-1/2"
	1222ASD	11/16"	10-1/4"
	1224ASD	3/4"	11"
	1226ASD	13/16"	11-7/8"
	1228ASD	7/8"	12-1/2"
	1230ASD	15/16"	13-1/4"
	1232ASD	1"	14"
2406	Tool Roll		



SET NO. 1200K-MASD 10 PC. **METRIC** COMBINATION ASD WRENCH SET—12 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 2.71 lbs.



Product ID No.	Contents	mm	Length
1200K-MASD	1210MASD	10	150.1
	1211MASD	11	175.5
	1212MASD	12	195.8
	1213MASD	13	200.9
	1214MASD	14	223.8
	1215MASD	15	232.4
	1216MASD	16	242.4
	1217MASD	17	261.3
	1218MASD	18	271.3
	1219MASD	19	280.2
2406	Tool Roll		

SET NO. 1200GHASD 10 PC. COMBINATION ASD WRENCH SET—6 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 3.31 lbs.



Product ID No.	Contents	in.	Length	
1200GHASD	1214HASD	7/16"	7"	
	1216HASD	1/2"	8"	
	1218HASD	9/16"	8-7/8"	
	1220HASD	5/8"	9-1/2"	
	1222HASD	11/16"	10-1/4"	
	1224HASD	3/4"	11"	
	1226HASD	13/16"	11-7/8"	
	1228HASD	7/8"	12-1/2"	
	1230HASD	15/16"	13-1/4"	
	1232HASD	1"	14"	
	2406	Tool Roll		

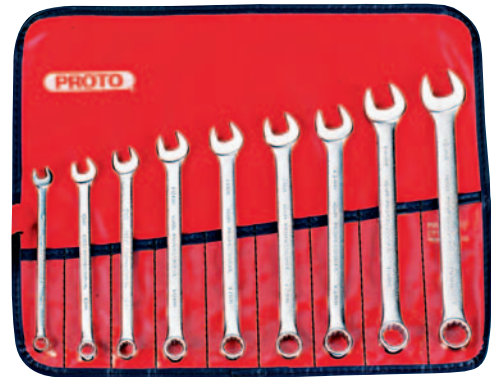


SET NO. 1200MHASD
10 PC. METRIC COMBINATION
ASD WRENCH SET—6 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 3 lbs.



Product ID No.	Contents	mm	Length
1200MHASD	1210MHASD	10	150.1
	1211MHASD	11	175.5
	1212MHASD	12	195.8
	1213MHASD	13	200.9
	1214MHASD	14	223.8
	1215MHASD	15	232.4
	1216MHASD	16	242.4
	1217MHASD	17	261.3
	1218MHASD	18	271.3
	1219MHASD	19	280.2
2406	Tool Roll		



SET NO. 1200H-MASD
9 PC. METRIC COMBINATION
ASD WRENCH SET—12 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 1.43 lbs.



Product ID No.	Contents	mm	Length
1200H-MASD	1207MA	7	131.1
	1208MA	8	137.4
	1209MA	9	143.8
	1210MASD	10	150.1
	1211MASD	11	175.5
	1212MASD	12	195.8
	1213MASD	13	200.9
	1214MASD	14	223.8
	1215MASD	15	232.4
	2439	Tool Roll	



SET NO. 1200E 8 PC. SHORT COMBINATION WRENCH SET—6 POINT

- Satin finish.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 2.38 lbs.



Product ID No.	Contents	in.	Length
1200E	1204E	1/8"	2-49/64"
	1205E	5/32"	2-57/64"
	1206E	3/16"	3-1/64"
	1208E	1/4"	3-17/64"
	1209E	9/32"	3-7/16"
	1210E	5/16"	4-1/8"
	1211E	11/32"	4-7/16"
1212E	3/8"	4-5/8"	
2422	Tool Roll		



SET NO. 1200HASD 7 PC. COMBINATION ASD WRENCH SET—12 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Meets ergonomic criteria.
- Weight: 9.75 lbs.



Product ID No.	Contents	in.	Length
1200HASD	1212ASD	3/8"	6"
	1214ASD	7/16"	7"
	1216ASD	1/2"	8"
	1218ASD	9/16"	8-7/8"
	1220ASD	5/8"	9-1/2"
	1222ASD	11/16"	10-1/4"
	1224ASD	3/4"	11"
2401	Tool Roll		



COMBINATION WRENCHES—12 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	in.	B	C	D	C1	D1	L	Weight lbs.
1208A#††	1/4"	1964"	3964"	316"	2764"	1564"	4-7/8"	.05
1210A#†	5/16"	38"	4564"	316"	3364"	1764"	5-3/8"	.07
1212ASD#††	3/8"	1332"	1316"	316"	3964"	516"	6"	.10
1214ASD#††*	7/16"	1732"	1516"	1564"	4364"	2164"	7"	.14
1216ASD#††	1/2"	3964"	1-5/64"	1/4"	4964"	1132"	8"	.18
1218ASD#††	9/16"	1116"	1-3/16"	9/32"	2732"	2364"	8-7/8"	.21
1220ASD#††	5/8"	34"	1-21/64"	1964"	1516"	1332"	9-1/2"	.29
1222ASD#††	11/16"	1316"	1-29/64"	516"	1-164"	716"	10-1/4"	.35
1224ASD#††*	3/4"	5764"	1-37/64"	1132"	1-332"	1532"	11"	.41
1226ASD#††	13/16"	3132"	1-11/16"	2364"	1-1164"	1/2"	11-7/8"	.54
1228ASD#††	7/8"	1-1/16"	1-13/16"	38"	1-1/4"	3364"	12-1/2"	.65
1230ASD#††	15/16"	1-1/8"	1-29/32"	1332"	1-2764"	3764"	13-1/4"	.74
1232ASD#††	1"	1-13/64"	2-1/64"	1332"	1-1332"	3764"	14"	.95
1234ASD#††	1-1/16"	1-9/32"	2-9/64"	2964"	1-31/64"	3964"	15-1/4"	1.13
1236ASD#††	1-1/8"	1-23/64"	2-17/64"	1532"	1-2132"	4164"	15-7/8"	1.38
1240ASD#†	1-1/4"	1-1/2"	2-33/64"	3364"	1-3/4"	4564"	16-7/8"	1.89
1242†	1-5/16"	1-37/64"	2-41/64"	1732"	1-2732"	4764"	17"	2.15
1244†	1-3/8"	1-21/32"	2-49/64"	3564"	1-15/16"	2532"	17-5/8"	2.34
1246†	1-7/16"	1-47/64"	2-57/64"	3764"	2-364"	5164"	18-1/2"	2.67
1248†	1-1/2"	1-51/64"	3-1/64"	3964"	2-1/8"	5364"	19-3/8"	3.18
1252†	1-5/8"	1-63/64"	3-25/64"	2132"	2-1332"	2932"	20-1/4"	4.64
1254†	1-11/16"	1-63/64"	3-25/64"	2132"	2-1332"	2932"	23"	4.74
1256†	1-3/4"	2-11/64"	3-41/64"	4564"	2-3964"	3132"	23"	5.64
1258†	1-13/16"	2-11/64"	3-41/64"	4564"	2-3964"	3132"	25"	5.64
1260†	1-7/8"	2-25/64"	4-1/64"	4964"	2-57/64"	1-1/16"	28"	7.46
1264†	2"	2-25/64"	4-1/64"	4964"	2-57/64"	11/16"	28"	7.35
1266	2-1/16"	2-45/64"	4-33/64"	2732"	3-1/4"	1316"	29-1/2"	9.88
1268	2-1/8"	2-45/64"	4-33/64"	2732"	3-1/4"	1316"	29-1/2"	9.74
1270	2-3/16"	2-45/64"	4-33/64"	2732"	3-1/4"	1-3/16"	29-1/2"	9.45
1272	2-1/4"	2-45/64"	4-33/64"	2732"	3-1/4"	1-3/16"	29-1/2"	8.25
1276	2-3/8"	2-55/64"	5"	3132"	3-5/8"	1-5/16"	31-1/2"	13.12
1280	2-1/2"	3"	5"	3132"	3-5/8"	1-5/16"	31-1/2"	12.49

†Fed'l Specs.: GGG-W-636E

*Meets ergonomic criteria.

‡ANSI Spec.: B107.6

#AS 954

METRIC COMBINATION WRENCHES—12 POINT

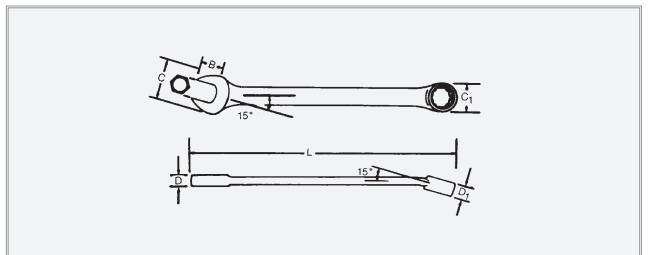
- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	mm	B	C	D	C1	D1	L	Weight lbs.
1207MA	7	7.9	15.1	4.4	10.3	5.9	131.1	.04
1208MA	8	9.9	17.4	4.7	12.7	6.8	137.4	.07
1209MA	9	10.3	19.1	4.7	13.9	6.8	143.8	.08
1210MASD	10	12.3	22.2	5.6	16.5	7.9	150.1	.13
1211MASD	11	13.1	23.4	5.9	17.4	8.3	175.5	.14
1212MASD	12	14.3	25.4	6.4	18.6	8.7	195.8	.17
1213MASD	13	15.5	26.1	6.4	19.8	8.7	200.9	.18
1214MASD	14	17.4	30.1	7.1	21.8	9.1	223.8	.22
1215MASD	15	19.1	31.7	7.5	22.2	9.1	232.4	.25
1216MASD	16	19.1	33.7	7.9	23.8	10.3	242.4	.26
1217MASD	17	21.0	35.5	8.3	26.1	11.1	261.3	.38
1218MASD	18	21.8	38.4	8.7	26.9	11.5	271.3	.41
1219MASD	19	23.0	40.1	8.7	28.1	11.9	280.2	.46
1220MASD	20	25.0	42.9	9.1	30.1	12.3	290.2	.55
1221MASD	21	25.0	42.9	9.1	30.1	12.3	300.2	.54
1222MASD	22	26.5	45.4	9.5	32.1	12.7	318.1	.62
1223MASD	23	28.5	48.2	10.3	34.0	13.9	328.1	.77
1224MASD	24	28.5	48.2	10.3	34.0	13.9	338.0	.77
1225MASD	25	30.5	50.8	10.7	36.0	15.1	357.0	.85
1226MASD	26	30.5	51.1	10.7	36.0	15.1	372.0	.97
1227MASD	27	30.9	54.3	11.5	37.9	15.5	386.9	1.17
1228MASD	28	34.5	57.4	11.9	42.1	16.3	394.9	1.37
1229MASD	29	34.5	57.5	11.9	42.1	16.3	402.9	1.39
1230MASD	30	34.5	57.5	11.9	42.1	16.3	402.9	1.41
1232MASD	32	38.1	64.0	13.1	44.8	17.9	429.7	1.82
1236M	36	44.1	73.5	13.5	51.9	20.2	492.1	2.77
1241M	41	51.1	86.1	16.3	61.6	23.4	584.2	4.34
1246M	46	55.1	92.5	17.0	66.4	24.6	635.0	5.50
1250M	50	60.9	102.0	18.5	73.3	27.0	711.0	6.97

ANSI Spec.: B107.6

REFERENCE MEASUREMENT KEY





COMBINATION WRENCHES—6 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	in.	B	C	D	C1	D1	L	Weight lbs.
1212HASD	3/8"	13/32"	13/16"	3/16"	39/64"	5/16"	6"	.10
1214HASD*	7/16"	17/32"	15/16"	15/64"	43/64"	21/64"	7"	.14
1216HASD*	1/2"	39/64"	1-5/64"	1/4"	49/64"	11/32"	8"	.18
1218HASD*	9/16"	11/16"	1-3/16"	9/32"	27/32"	23/64"	8-7/8"	.21
1220HASD*	5/8"	3/4"	1-21/64"	-19/64"	15/16"	13/32"	9-1/2"	.29
1222HASD*	11/16"	13/16"	1-29/64"	5/16"	1-1/64"	7/16"	10-1/4"	.35
1224HASD*	3/4"	57/64"	1-37/64"	11/32"	1-3/32"	15/32"	11"	.41
1226HASD*	13/16"	31/32"	1-11/16"	23/64"	1-11/64"	1/2"	11-7/8"	.54
1228HASD*	7/8"	1-1/16"	1-13/16"	3/8"	1-1/4"	33/64"	12-1/2"	.64
1230HASD*	15/16"	1-1/8"	1-29/32"	13/32"	1-27/64"	37/64"	13-1/4"	.74
1232HASD*	1"	1-13/64"	2-1/64"	13/32"	1-13/32"	37/64"	14"	.95

Fed'l Specs.: GGG-W-636E
*ANSI Spec.: B107.6



METRIC COMBINATION WRENCHES—6 POINT

- Satin finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	mm	B	C	D	C1	D1	L	Weight lbs.
1207MHA	7	7.9	15.1	4.4	10.3	5.9	131.1	.04
1208MHA	8	9.5	17.4	4.7	13.1	6.8	137.4	.07
1209MHA	9	10.7	19.1	4.7	13.5	6.8	143.8	.08
1210MHASD	10	12.3	22.2	5.6	16.3	7.9	150.1	.13
1211MHASD	11	13.5	23.5	5.9	17.4	8.3	175.5	.14
1212MHASD	12	14.3	25.4	6.4	18.6	8.3	195.8	.17
1213MHASD	13	15.5	26.1	6.4	19.8	8.7	200.9	.18
1214MHASD	14	17.4	30.1	7.1	21.8	9.1	223.8	.22
1215MHASD	15	19.1	31.7	7.5	22.6	9.3	232.4	.25
1216MHASD	16	19.3	33.9	7.9	23.8	10.3	242.4	.26
1217MHASD	17	21.0	36.8	8.3	26.1	11.1	261.3	.38
1218MHASD	18	21.8	38.4	8.7	27.2	11.1	271.3	.41
1219MHASD	19	23.0	40.1	8.8	28.1	12.3	280.2	.46

ANSI Spec.: B107.6



SHORT COMBINATION WRENCHES—12 POINT

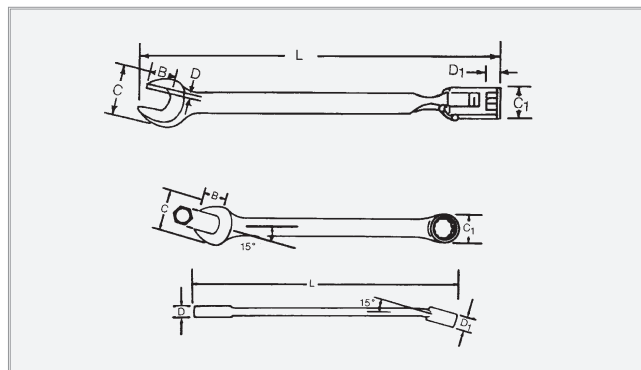
- Satin finish.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.

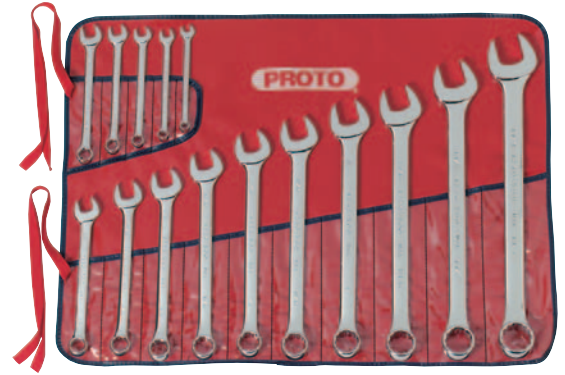


Product ID No.	in.	B	C	D	C1	D1	L	Weight lbs.
1208T	1/4"	19/64"	17/32"	1/8"	25/64"	5/16"	3-1/4"	.02
1210T	5/16"	3/8"	41/64"	3/16"	15/32"	7/32"	3-1/2"	.04
1212T	3/8"	7/16"	3/4"	13/64"	35/64"	1/4"	4-1/4"	.07
1214T	7/16"	33/64"	7/8"	15/64"	5/8"	17/64"	5-1/16"	.10
1216T	1/2"	19/32"	1"	1/4"	23/64"	19/64"	5-11/16"	.11
1218T	9/16"	43/64"	1-1/8"	9/32"	51/64"	21/64"	5-13/16"	.16
1220T	5/8"	47/64"	1-17/64"	23/64"	57/64"	11/32"	6-3/16"	.18
1222T	11/16"	13/16"	1-25/64"	11/32"	31/32"	3/8"	7-1/16"	.23
1224T	3/4"	57/64"	1-33/64"	3/8"	1-3/64"	13/32"	8-1/16"	.33

Fed'l Specs.: GGG-W-636E

REFERENCE MEASUREMENT KEY





SET NO. 1200RM-T500
17 PC. METRIC COMBINATION
WRENCH SET—12 POINT

- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 7.27 lbs.



Product ID No.	Contents	mm	Length
1200RM-T500	1207M-T500	7	131.1
	1208M-T500	8	137.4
	1209M-T500	9	143.8
	1210M-T500	10	150.1
	1211M-T500	11	175.5
	1212M-T500	12	195.8
	1213M-T500	13	200.9
	1214M-T500	14	223.8
	1215M-T500	15	232.4
	1216M-T500	16	242.4
	1217M-T500	17	261.3
	1218M-T500	18	271.3
	1219M-T500	19	280.2
	1220M-T500	20	290.2
	1221M-T500	21	300.2
	1222M-T500	22	318.1
1224M-T500	24	338.0	
2438	Tool Roll		

SET NO. 1200F-T500
15 PC. COMBINATION
ASD WRENCH SET—12 POINT

- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 9.76 lbs.



Product ID No.	Contents	in.	Length
1200F-T500	1210-T500	5/16"	5-1/2"
	1212-T500	3/8"	6"
	1214-T500	7/16"	7"
	1216-T500	1/2"	8"
	1218-T500	9/16"	8-7/8"
	1220-T500	5/8"	9-1/2"
	1222-T500	11/16"	10-1/4"
	1224-T500	3/4"	11"
	1226-T500	13/16"	11-7/8"
	1228-T500	7/8"	12-1/2"
	1230-T500	15/16"	13-1/4"
	1232-T500	1"	14"
	1234-T500	1-1/16"	15-1/4"
	1236-T500	1-1/8"	15-7/8"
	1240-T500	1-1/4"	16-7/8"
2413	Tool Roll		





SET NO. 1200HM-T500 9 PC. **METRIC** COMBINATION WRENCH SET—12 POINT

- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 1.62 lbs.



Product ID No.	Contents	mm	Length
1200HM-T500	1207M-T500	7	131.1
	1208M-T500	8	137.4
	1209M-T500	9	143.8
	1210M-T500	10	150.1
	1211M-T500	11	175.5
	1212M-T500	12	195.8
	1213M-T500	13	200.9
	1214M-T500	14	223.8
	1215M-T500	15	232.4
2439	Tool Roll		



SET NO. 1200MHASD 9 PC. **METRIC** COMBINATION WRENCH SET—12 POINT

- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 1.62 lbs.



Product ID No.	Contents	mm	Length
1200MHASD	11207M-T500	7	131.1
	1208M-T500	8	137.4
	1209M-T500	9	143.8
	1210M-T500	10	150.1
	1211M-T500	11	175.5
	1212M-T500	12	195.8
	1213M-T500	13	200.9
	1214M-T500	14	223.8
	1215M-T500	15	232.4
2439	Tool Roll		



**SET NO. 1200H-T500
7 PC. COMBINATION
ASD WRENCH SET—12 POINT**

- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 2.02 lbs.



Product ID No.	Contents	in.	Length
1200H-T500	1212-T500	3/8"	6"
	1214-T500	7/16"	7"
	1216-T500	1/2"	8"
	1218-T500	9/16"	8-7/8"
	1220-T500	5/8"	9-1/2"
	1222-T500	11/16"	10-1/4"
	1224-T500	3/4"	11"
	2401	Tool Roll	



COMBINATION WRENCHES—12 POINT

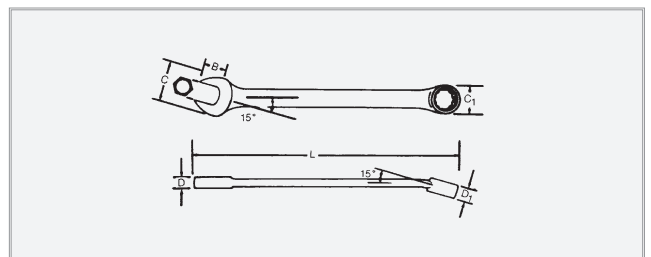
- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	in.	B	C	D	C1	D1	L	Weight lbs.
1210-T500	5/16"	3/8"	45/64"	3/16"	33/64"	17/64"	5-3/8"	.07
1212-T500	3/8"	13/32"	13/16"	3/16"	39/64"	5/16"	6"	.10
1214-T500	7/16"	17/32"	15/16"	15/64"	43/64"	21/64"	7"	.14
1216-T500	1/2"	39/64"	1-5/64"	1/4"	49/64"	11/32"	8"	.18
1218-T500	9/16"	11/16"	1-3/16"	9/32"	27/32"	23/64"	8-7/8"	.21
1220-T500	5/8"	3/4"	1-21/64"	19/64"	15/16"	13/32"	9-1/2"	.29
1222-T500	11/16"	13/16"	1-29/64"	5/16"	1-1/64"	7/16"	10-1/4"	.35
1224-T500	3/4"	57/64"	1-37/64"	11/32"	1-3/32"	15/32"	11"	.41
1226-T500	13/16"	31/32"	1-11/16"	23/64"	1-11/64"	1/2"	11-7/8"	.54
1228-T500	7/8"	1-1/16"	1-13/16"	3/8"	1-1/4"	33/64"	12-1/2"	.65
1230-T500	15/16"	1-1/8"	1-29/32"	13/32"	1-27/64"	37/64"	13-1/4"	.74
1232-T500	1"	1-13/64"	2-1/64"	13/32"	1-13/32"	37/64"	14"	.95
1234-T500	1-1/16"	1-9/32"	2-9/64"	29/64"	1-31/64"	39/64"	15-1/4"	1.13
1236-T500	1-1/8"	1-23/64"	2-17/64"	15/32"	1-21/32"	41/64"	15-7/8"	1.38
1240-T500	1-1/4"	1-1/2"	2-33/64"	33/64"	1-3/4"	45/64"	16-7/8"	1.89

Fed'l Specs.: GGG-W-636E

REFERENCE MEASUREMENT KEY





METRIC COMBINATION WRENCHES—12 POINT

- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	mm	B	C	D	C1	D1	L	Weight lbs.
1207M-T500	7	7.9	15.1	4.4	10.3	5.9	131.1	.04
1208M-T500	8	9.9	17.4	4.7	12.7	6.8	137.4	.07
1209M-T500	9	10.3	19.1	4.7	13.9	6.8	143.8	.08
1210M-T500	10	12.3	22.2	5.6	16.5	7.9	150.1	.13
1211M-T500	11	13.1	23.4	5.9	17.4	8.3	175.5	.14
1212M-T500	12	14.3	25.4	6.4	18.6	8.7	195.8	.17
1213M-T500	13	15.5	26.1	6.4	19.8	8.7	200.9	.18
1214M-T500	14	17.4	30.1	7.1	21.8	9.1	223.8	.22
1215M-T500	15	19.1	31.7	7.5	22.2	9.1	232.4	.25
1216M-T500	16	19.1	33.7	7.9	23.8	10.3	242.4	.26
1217M-T500	17	21.0	35.5	8.3	26.1	11.1	261.3	.38
1218M-T500	18	21.8	38.4	8.7	26.9	11.5	271.3	.41
1219M-T500	19	23.0	40.1	8.7	28.1	11.9	280.2	.46
1220M-T500	20	25.0	42.9	9.1	30.1	12.3	290.2	.55
1221M-T500	21	25.0	42.9	9.1	30.1	12.3	300.2	.54
1222M-T500	22	26.5	45.4	9.5	32.1	12.7	318.1	.62
1223M-T500	23	28.5	48.2	10.3	34.0	13.9	328.1	.77
1224M-T500	24	28.5	48.2	10.3	34.0	13.9	338.0	.77

ANSI Spec.: B107.9



SHORT COMBINATION WRENCHES—6 POINT

- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	in.	B	C	D	C1	D1	L	Weight lbs.
1208E*	1/4"	19/64"	9/16"	1/64"	27/64"	3/16"	3-17/64"	.03
1209E	9/32"	21/64"	5/8"	1/64"	7/16"	13/64"	3-7/16"	.04
1210E*	5/16"	3/8"	11/16"	3/16"	1/2"	7/32"	4-1/8"	.03
1211E*	11/32"	25/64"	47/64"	3/16"	17/32"	15/64"	4-7/16"	.05
1212E	3/8"	7/16"	53/64"	13/64"	37/64"	1/4"	4-5/8"	.07
1214E*	7/16"	33/64"	7/8"	15/64"	5/8"	17/64"	5-1/16"	.12
1216E*	1/2"	19/32"	1"	1/4"	3/4"	5/16"	5-1/4"	.16
1218E*	9/16"	43/64"	1-1/8"	9/32"	51/64"	5/16"	5-7/8"	.16
1220E*	5/8"	47/64"	1-17/64"	57/64"	57/64"	11/32"	6-3/16"	.17

*Fed'l Specs.: GGG-W-636E

*ANSI Spec.: B107.6



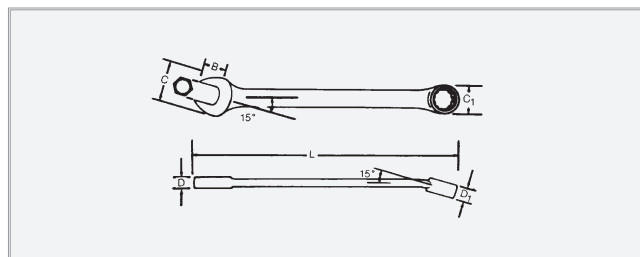
SHORT COMBINATION WRENCHES—6 POINT

Product ID No.	in.	B	C	D	C1	D1	L	Weight lbs.
1204E*	1/8"	11/64"	11/32"	1/8"	9/32"	5/32"	2-49/64"	.01
1205E*	5/32"	13/64"	13/32"	1/8"	19/64"	5/32"	2-57/64"	.01
1206E*	3/16"	15/64"	15/32"	9/64"	11/32"	5/32"	3-1/64"	.02

Fed'l Specs.: GGG-W-636E

ANSI Spec.: B107.6

REFERENCE MEASUREMENT KEY





SET NO. 1200F-MBASD
15 PC. METRIC PROTOBLACK™
COMBINATION ASD WRENCH SET—12 POINT

- Black oxide finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Meets ergonomic criteria.
- Weight: 4.25 lbs.



Product ID No.	Contents	mm	Length
1200F-MBASD	1207MBA	7	131.1
	1208MBA	8	137.4
	1209MBA	9	143.8
	1210MBASD	10	150.1
	1211MBASD	11	175.5
	1212MBASD	12	195.8
	1213MBASD	13	200.9
	1214MBASD	14	223.8
	1215MBASD	15	232.4
	1216MBASD	16	242.4
	1217MBASD	17	261.3
	1218MBASD	18	271.3
	1219MBASD	19	280.2
	1220MBASD	20	290.2
1221MBASD	21	300.2	
2441	Tool Roll		



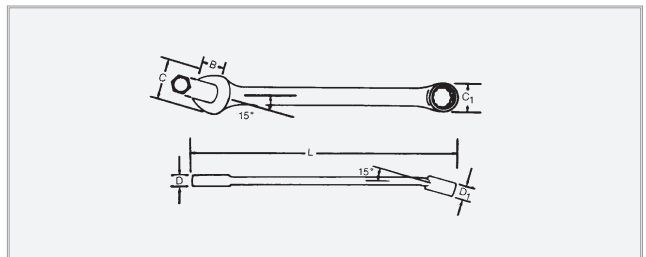
SET NO. 1200FBASD
14 PC. PROTOBLACK™
COMBINATION ASD WRENCH SET—12 POINT

- Black oxide finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 9.76 lbs.



Product ID No.	Contents	in.	Length
1200FBASD	1212BASD	3/8"	6"
	1214BASD	7/16"	7"
	1216BASD	1/2"	8"
	1218BASD	9/16"	8-7/8"
	1220BASD	5/8"	9-1/2"
	1222BASD	11/16"	10-1/4"
	1224BASD	3/4"	11"
	1226BASD	13/16"	11-7/8"
	1228BASD	7/8"	12-1/2"
	1230BASD	15/16"	13-1/4"
	1232BASD	1"	14"
	1234BASD	1-1/16"	15-1/4"
	1236BASD	1-1/8"	15-7/8"
	1240BASD	1-1/4"	16-7/8"
2413	Tool Roll		

REFERENCE MEASUREMENT KEY





SET NO. 1200HBASD 7 PC. PROTOBLACK™ COMBINATION ASD WRENCH SET—12 POINT

- Black oxide finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 1.84 lbs.



Product ID No.	Contents	in.	Length
1200HBASD	1212BASD	3/8"	6"
	1214BASD	7/16"	7"
	1216BASD	1/2"	8"
	1218BASD	9/16"	8-7/8"
	1220BASD	5/8"	9-1/2"
	1222BASD	11/16"	10-1/4"
	1224BASD	3/4"	11"
2401	Tool Roll		



PROTOBLACK™ COMBINATION WRENCHES—12 POINT

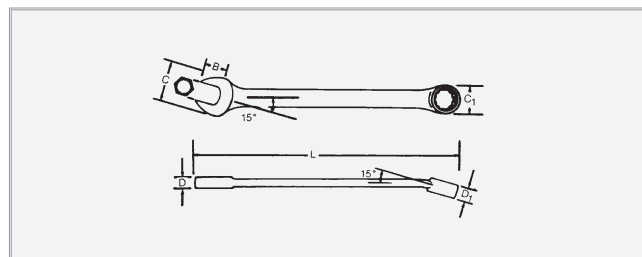
- Black oxide finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	in.	B	C	D	C1	D1	L	Weight lbs.
1212BASD	3/8"	27/64"	13/16"	7/32"	39/64"	5/16"	6"	.10
1214BASD	7/16"	17/32"	15/16"	1/4"	43/64"	21/64"	7"	.14
1216BASD	1/2"	39/64"	1-5/64"	17/64"	49/64"	11/32"	8-7/8"	.18
1218BASD	9/16"	11/16"	1-3/16"	19/64"	27/32"	23/64"	8-1/16"	.21
1220BASD	5/8"	3/4"	1-21/64"	5/16"	15/16"	13/32"	9-1/2"	.29
1222BASD	11/16"	13/16"	1-29/64"	11/32"	1-1/64"	7/16"	10-1/4"	.35
1224BASD	3/4"	57/64"	1-37/64"	23/64"	1-3/32"	15/32"	11"	.41
1226BASD	13/16"	31/32"	1-11/16"	3/8"	1-11/64"	1/2"	11-7/8"	.54
1228BASD	7/8"	1-1/16"	1-13/16"	13/32"	1-1/4"	17/32"	12-1/2"	.64
1230BASD	15/16"	1-1/8"	1-29/32"	1/8"	1-11/32"	9/16"	13-1/4"	.74
1232BASD	1"	1-13/64"	2-1/64"	29/64"	1-13/32"	19/32"	14"	.95
1234BASD	1-1/16"	1-9/32"	2-9/64"	-15/32"	1-31/64"	5/8"	15-1/4"	1.13
1236BASD	1-1/8"	1-23/64"	2-17/64"	33/64"	1-21/32"	41/64"	15-7/8"	1.38
1240BASD	1-1/4"	1-1/2"	2-33/64"	17/32"	1-3/4"	45/64"	16-7/8"	1.89
1242B*	1-5/16"	1-37/64"	2-41/64"	17/32"	2-1/8"	47/64"	17-5/8"	2.15
1244B*	1-3/8"	1-21/32"	2-49/64"	35/64"	1-15/16"	25/32"	18-1/2"	2.34
1246B*	1-7/16"	1-47/64"	2-57/64"	37/64"	23/64"	51/64"	19-3/8"	2.67
1248B*	1-1/2"	1-3/4"	3"	5/8"	2-1/8"	53/64"	20-1/8"	2.15
1252B*	1-5/8"	1-63/64"	3-25/64"	21/32"	2-13/32"	29/32"	23"	4.64
1254B*	1-11/16"	1-63/64"	3-25/64"	21/32"	2-13/32"	29/32"	23"	4.74
1256B*	1-3/4"	2-11/64"	3-41/64"	45/64"	2-39/64"	31/32"	25"	5.64
1258B*	1-13/16"	2-11/64"	3-41/64"	45/64"	2-39/64"	31/32"	25"	5.59
1260B*	1-7/8"	2-25/64"	4-1/64"	49/64"	2-57/64"	1-1/16"	28"	7.46
1264B*	2"	2-25/64"	4-1/64"	49/64"	2-57/64"	1-1/16"	28"	7.35

*Fed'l Specs.: GGG-W-636E

REFERENCE MEASUREMENT KEY





METRIC PROTOBLACK™ COMBINATION WRENCHES—12 POINT

- Black oxide finish.
- Open End: Anti-slip design (ASD)
 - Locking groove to help prevent slippage.
 - Arched surface which spreads the force over a 400% larger contact area to help prolong life.
 - No ribs or serrations to damage fasteners.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	mm	B	C	D	C1	D1	L	Weight lbs.
1207MBA	7	7.9	14.7	4.7	10.7	5.2	131.1	.04
1208MBA	8	9.9	17.4	5.2	13.5	7.1	137.4	.07
1209MBA	9	10.3	18.6	5.2	13.5	7.1	143.8	.08
1210MBASD	10	12.3	22.2	5.9	16.3	7.9	150.1	.13
1211MBASD	11	13.5	23.8	6.4	17.4	8.3	175.5	.14
1212MBASD	12	14.3	28.1	6.4	18.6	8.3	195.8	.17
1213MBASD	13	15.5	26.6	6.8	19.8	8.7	200.9	.18
1214MBASD	14	17.4	30.1	7.5	21.8	9.1	223.8	.22
1215MBASD	15	18.3	31.0	7.5	22.2	9.1	232.4	.25
1216MBASD	16	19.1	33.7	8.3	24.2	10.3	242.4	.26
1217MBASD	17	21.0	36.8	8.7	26.1	11.1	261.3	.38
1218MBASD	18	21.8	38.4	8.3	26.9	11.5	271.3	.41
1219MBASD	19	23.0	40.0	9.1	28.1	11.9	280.2	.46
1220MBASD	20	25.0	42.9	9.9	30.1	12.7	290.2	.55
1221MBASD	21	25.0	42.9	10.3	30.1	12.7	300.2	.54
1222MBASD	22	26.5	45.5	10.3	32.5	13.9	318.1	.62
1223MBASD	23	28.5	48.4	10.3	34.1	14.3	328.1	.77
1224MBASD	24	28.5	49.6	10.3	34.1	14.3	338.0	.77

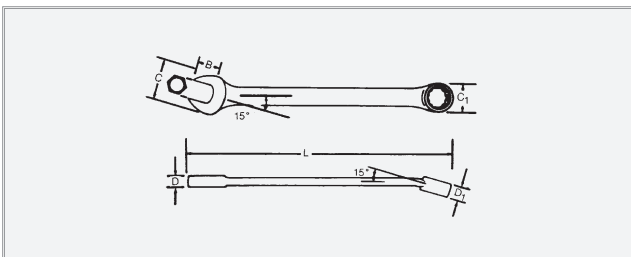


COMBINATION FLEX HEAD WRENCHES—12 POINT

- Satin finish.

Product ID No.	in.	B	C	D	C1	D1	L	Weight lbs.
1270-12	3/8"	27/64"	55/64"	15/64"	5/8"	1/4"	6"	.14
1270-14	7/16"	1/2"	1"	1/4"	41/64"	17/64"	6-7/8"	.20
1270-16	1/2"	37/64"	1-3/32"	9/32"	11/16"	5/16"	7-3/4"	.26
1270-18	9/16"	21/32"	1-15/64"	5/16"	13/16"	21/64"	8-5/8"	.36
1270-20	5/8"	23/32"	1-23/32"	21/64"	7/8"	3/8"	9-1/2"	.46
1270-22	11/16"	51/64"	1-1/2"	11/32"	15/16"	3/8"	10-3/8"	.58
1270-24	3/4"	7/8"	1-41/64"	23/64"	1"	7/16"	11-1/4"	.60
1270-28	7/8"	1-1/64"	1-27/32"	13/32"	1-1/8"	1/2"	13"	.93

REFERENCE MEASUREMENT KEY



SET NO. 1270A 7 PC. FLEX HEAD WRENCH SET—12 POINT

- Satin finish.
- Weight 2.97 lbs.



Product ID No.	in.	Length
1270-12	3/8"	6"
1270-14	7/16"	6-7/8"
1270-16	1/2"	7-3/4"
1270-18	9/16"	8-5/8"
1270-20	5/8"	9-1/2"
1270-22	11/16"	10-3/8"
1270-24	3/4"	11-1/4"
2401	Tool Roll	



SET NO. 1270B 4 PC. FLEX HEAD WRENCH SET—12 POINT

- Satin finish.
- Weight .88 lbs.



Product ID No.	in.	Length
1270-14	7/16"	6-7/8"
1270-16	1/2"	7-3/4"
1270-18	9/16"	8-5/8"
1270-20	5/8"	9-1/2"
2442	Tool Roll	



DEEP OFFSET BOX WRENCHES—12 POINT

- Satin finish.
- Heads are deeply offset at 60° angle to handles to reach recessed fastener.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Meets ergonomic criteria.



Product ID No.	in.	C	D	C1	D1	L	Weight lbs.
8180†	3/8" x 7/16"	3964"	516"	4564"	1132"	7-3/4"	.17
8181†	1/2" x 9/16"	5164"	2364"	5764"	2364"	9"	.28
8182	5/8" x 11/16"	3132"	1332"	1-132"	7/16"	10-1/4"	.41
8183A†	1 1/16" x 13/16"	1-316"	1/2"	1-1/4"	1/2"	11-1/2"	.56
8184	3/4" x 7/8"	1-1/8"	1/2"	1-1/4"	17/32"	12-3/4"	.69
8185	15/16" x 1"	1-1132"	5/8"	1-1332"	5/8"	14"	.97

†Fed'l Specs.: GGG-W-636E
ANSI Spec.: B107.6



SHORT BOX WRENCHES—12 POINT

- Satin finish.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	in.	C	D	C1	D1	L	Weight lbs.
1120	5/16" x 3/8"	3364"	1764"	3764"	1964"	4-1/4"	.07
1122	3/8" x 7/16"	3764"	1964"	4364"	2164"	4-5/8"	.09
1125	7/16" x 1/2"	4364"	2164"	4964"	1132"	5"	.10
1126	1/2" x 9/16"	4364"	1132"	5564"	2364"	5-3/8"	.12
1131	5/8" x 3/4"	1-2732"	1332"	1-332"	1532"	6-1/8"	.25

Fed'l Specs.: GGG-W-636E
ANSI Spec.: B107.6



BOX WRENCHES—12 POINT

- Satin finish.
- Standard 15° offset for knuckle clearance.



Product ID No.	in.	C	D	C1	D1	L	Weight lbs.
1151	1-1/16" x 1-1/4"	1-3/4"	4564"	1-1/2"	5/8"	18-1/4"	1.82
1155	1-1/4" x 1-5/16"	1-7/8"	4764"	1-3/4"	3/4"	19-1/4"	1.97
1160	1-1/4" x 1-3/8"	1-1516"	3/4"	1-3/4"	3/4"	20-1/4"	2.22
1162	1-7/16" x 1-1/2"	2-1/8"	1316"	2-3/64"	5164"	22-1/4"	2.98
1164	1-5/8" x 1-11/16"	2-3/8"	2932"	2-1332"	2932"	24-1/2"	3.74

Fed'l Specs.: GGG-W-636E
ANSI Spec.: B107.6



SHORT DEEP OFFSET BOX WRENCHES—12 POINT

- Satin finish.
- Heads are deeply offset at 60° angle to handles to reach recessed fastener.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	in.	C	D	C1	D1	L	Weight lbs.
8160	3/8" x 7/16"	1932"	516"	4564"	516"	5"	.12
8161	1/2" x 9/16"	58"	2364"	7/8"	2364"	5-1/2"	.16
8162	5/8" x 11/16"	1516"	7/16"	1-164"	7/16"	6"	.24
8163*	3/4" x 13/16"	1-564"	1532"	1-1364"	1532"	6-1/2"	.32

*Fed'l Specs.: GGG-W-636E



OBSTRUCTION BOX WRENCHES—12 POINT

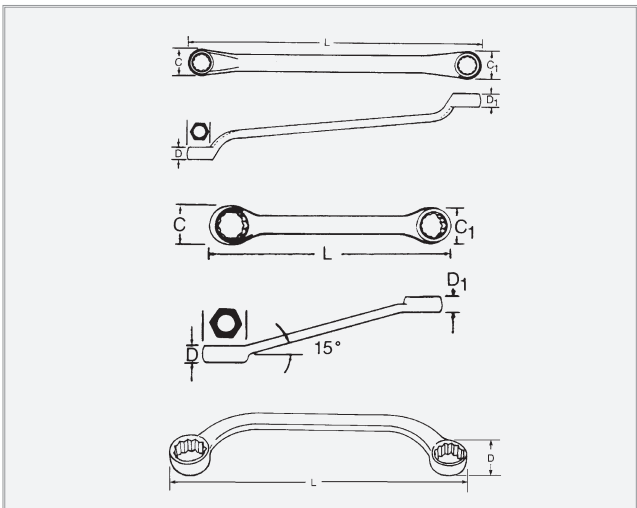
- Satin finish.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	in.	D	L	Weight lbs.
1725	7/16" x 1/2"	58"	5-7/16"	.14
1730	9/16" x 5/8"	5164"	5-5164"	.20
1731	5/8" x 3/4"	5564"	6-1/2"	.33

Fed'l Specs.: GGG-W-636E

REFERENCE MEASUREMENT KEY





SET NO. 1100S-M
11 PC. METRIC BOX WRENCH SET—12 POINT

- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 7.4 lbs.



Product ID No.	Contents	Size	C	C1	Length
1100S-M	1050M	6 x 7	11.4	10.2	146.5
	1051M	8 x 9	13.7	12.3	171.7
	1053M	10 x 11	16.5	15.4	202.3
	1057M	12 x 13	19.2	18.0	225.2
	1061M	14 x 15	22.2	20.8	246.3
	1064M	16 x 18	26.1	23.1	271.6
	1065M	17 x 19	27.4	24.9	288.7
	1072M	21 x 24	34.3	30.3	340.3
	1073M	22 x 24	34.3	32.0	348.2
	1077M	27 x 30	42.6	38.5	404.5
1079M	30 x 32	45.3	42.6	437.1	
1100S-MP	Tool Roll				



SET NO. 1100D-M
7 PC. METRIC BOX WRENCH SET

- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 2.04 lbs.



Product ID No.	Contents	Size	C	C1	Length	
1100D-M	1050M	6 x 7	11.4	10.2	146.5	
	1051M	8 x 9	13.7	12.3	171.7	
	1053M	10 x 11	16.5	15.4	202.3	
	1057M	12 x 13	19.2	18.0	225.2	
	1061M	14 x 15	22.2	20.8	246.3	
	1064M	16 x 18	26.1	23.1	271.6	
	1065M	17 x 19	27.4	24.9	288.7	
	1100D-MP	Tool Roll				



SET NO. 1100R
7 PC. BOX WRENCH SET—12 POINT

- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 4.23 lbs.



Product ID No.	Contents	in.	Length
1100R	1170	5/16" x 3/8"	6-15/16"
	1171	7/16" x 1/2"	8-1/16"
	1172	9/16" x 5/8"	9-7/16"
	1173	1 1/16" x 3/4"	11-1/8"
	1174	1 3/16" x 7/8"	13-1/8"
	1175	1 5/16" x 1"	15-1/8"
	1176	1 1/16" x 1 1/8"	17-1/2"
	2502	Tool Roll	



SET NO. 1000G-500
7 PC. OFFSET BOX WRENCH SET—12 POINT

- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: 3.84 lbs.



Product ID No.	Contents	in.	Length
1000G-500	1012-500	3/8" x 7/16"	7-3/4"
	1016-500	1/2" x 9/16"	8-7/8"
	1018-500	9/16" x 5/8"	9-1/2"
	1022-500	1 1/16" x 3/4"	11-3/16"
	1026-500	1 3/16" x 7/8"	12-11/16"
	1030-500	1 5/16" x 1"	14-3/8"
	1034-500	1 1/16" x 1 1/8"	16-3/4"
2502	Tool Roll		



SET NO. 1100G 5 PC. BOX WRENCH SET—12 POINT

- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Standard 15° offset for knuckle clearance.
- Weight: 2.2 lbs.



Product ID No.	Contents	in.	Length
1100G	1170	5/16" x 3/8"	6-15/16"
	1171	7/16" x 1/2"	8-1/16"
	1172	9/16" x 5/8"	9-7/16"
	1173	11/16" x 3/4"	11-1/8"
	1174	13/16" x 7/8"	13-1/8"
	2405	Tool Roll	

METRIC OFFSET BOX WRENCHES—12 POINT

- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	mm	C	C1	L	Weight lbs.
1050M	6 x 7	11.4	10.2	146.5	.05
1051M	8 x 9	13.7	12.3	171.7	.01
1053M	10 x 11	16.5	15.4	202.3	.01
1057M	12 x 13	19.2	18.0	225.2	.24
1061M	14 x 15	22.2	20.8	246.3	.33
1064M	16 x 18	26.1	23.1	271.6	.01
1065M	17 x 19	27.4	24.9	288.7	.01
1069M	19 x 22	32.0	27.4	316.7	.71
1072M	21 x 24	34.3	30.3	340.3	.90
1077M	27 x 30	42.6	38.5	404.5	.01
1079M	30 x 32	45.3	42.6	437.1	.01



BOX WRENCHES—12 POINT

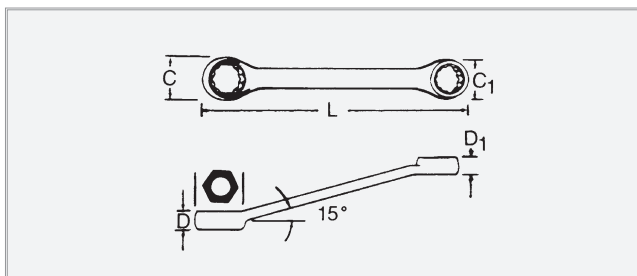
- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- Standard 15° offset for knuckle clearance.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	in.	C	D	C1	D1	L	Weight lbs.
1170*	5/16" x 3/8"	37/64"	17/64"	15/32"	15/64"	6-15/16"	.10
1171*	7/16" x 1/2"	3/4"	21/64"	21/32"	19/64"	8-1/16"	.20
1126L	1/2" x 9/16"	7/8"	3/8"	3/4"	23/64"	8-3/8"	.24
1172*	9/16" x 5/8"	15/16"	25/64"	27/32"	23/64"	9-7/16"	.27
1173*	11/16" x 3/4"	17/64"	29/64"	11/64"	27/64"	11-1/8"	.40
1139*	3/4" x 7/8"	1-1/4"	33/64"	1-1/8"	33/64"	13-1/8"	.65
1174*	13/16" x 7/8"	1-19/64"	33/64"	1-3/16"	31/64"	13-1/8"	.65
1175	15/16" x 1"	1-15/32"	37/64"	1-25/64"	35/64"	15-1/8"	.96
1176*	1-1/16" x 1-1/8"	1-37/64"	5/8"	1-1/2"	19/32"	17-1/2"	1.54


Fed'l Specs.: GGG-W-636E
*ANSI Spec.: B107.6

REFERENCE MEASUREMENT KEY






SET NO. 1180MA
7 PC. METRIC OFFSET
RATCHETING BOX WRENCH SET—6 & 12 POINT
• Weight: 3.60 lbs.

Product ID No.	Contents	Point Size	 mm	Length
1180MA	1181M	6 point	7 x 8	103.0
	1182M	6 point	9 x 10	132.0
	1183MA	12 point	11 x 13	166.0
	1184MA	12 point	12 x 14	166.0
	1185M	12 point	15 x 17	199.0
	1186M	12 point	16 x 18	199.0
	1187M	12 point	19 x 21	221.0
	2404		Tool Roll	




SET NO. 1190MA
5 PC. METRIC
RATCHETING BOX WRENCH SET—6 & 12 POINT
• Weight: 2.12 lbs.

Product ID No.	Contents	Point Size	 mm	Length
1190MA	1191M	6 point	7 x 8	108.7
	1192M	6 point	9 x 10	140.2
	1193MA*	12 point	11 x 13	173.0
	1194MA*	12 point	12 x 14	173.0
	1195MA*	12 point	15 x 17	206.0
	2409		Tool Roll	




SET NO. 1190A
5 PC. RATCHETING BOX WRENCH SET—12 POINT
• Weight: 1.72 lbs.

Product ID No.	Contents	 in.	Length
1190A	1191T	1/4" x 5/16"	4-9/32"
	1192T	3/8" x 7/16"	5-1/2"
	1193T	1/2" x 9/16"	6-3/4"
	1194	5/8" x 11/16"	8-7/64"
	1195	3/4" x 7/8"	9-1/4"
	2409		Tool Roll



SET NO. 1180A
5 PC. OFFSET RATCHETING
BOX WRENCH SET—6 POINT
• Weight: 2.24 lbs.

Product ID No.	Contents	Point Size	 in.	Length
1180A	1181	6 point	1/4" x 5/16"	4-7/64"
	1182	6 point	3/8" x 7/16"	5-1/4"
	1183	6 point	1/2" x 9/16"	6-1/2"
	1184	12 point	5/8" x 11/16"	7-3/4"
	1185	12 point	3/4" x 7/8"	8-7/8"
	2409		Tool Roll	



SET NO. 1190A 3 PC. RATCHETING BOX WRENCH SET—12 POINT

• Weight: 1.3 lbs.

Product ID No.	Contents	in.	Length
1190A	1192T	3/8" x 7/16"	5-1/2"
	1193T	1/2" x 9/16"	6-3/4"
	1196	5/8" x 3/4"	8-7/64"
	2437	Tool Roll	



REVERSIBLE RATCHETING BOX WRENCHES

- Built in retaining ring in each ratchet wheel adds speed and convenience to great accessibility.
- Fasteners can be tightened and loosened up to five times faster than with a conventional wrench or ratchet box.
- The wrench self-aligns with the fastener.

Product ID No.	in.	L
1191LO	1/4"-5/16"	4-3/8"
1192LO	3/8"-7/16"	5-1/2"
1193LO	1/2"-9/16"	6-7/8"
1194LO	5/8"-11/16"	8-1/8"
1195LO	3/4"-7/8"	9-1/4"

Fed'l Specs.: GGG-W-001405



OFFSET RATCHETING BOX WRENCHES—6 POINT

• Box ends offset 25°.

Product ID No.	in.	C	D	C1	D1	L	Weight lbs.
1181	1/4" x 5/16"	19/32"	3/8"	41/64"	3/8"	4-1/8"	.15
1182	3/8" x 7/16"	25/32"	3/8"	7/8"	3/8"	5-1/4"	.21
1183	1/2" x 9/16"	1"	1/2"	1-9/64"	1/2"	6-1/2"	.43



REVERSIBLE *METRIC* RATCHETING BOX WRENCHES

- Built in retaining ring in each ratchet wheel adds speed and convenience to great accessibility.
- Fasteners can be tightened and loosened up to five times faster than with a conventional wrench or ratchet box.
- The wrench self-aligns with the fastener.

Product ID No.	mm	L
1191MLO	7 x 8 mm	111.1
1192MLO	9 x 10 mm	139.7
1193MLO	11 x 12 mm	174.6
1194MLO	13 x 14 mm	174.6
1195MLO	15 x 17 mm	206.4

Fed'l Specs.: GGG-W-001405

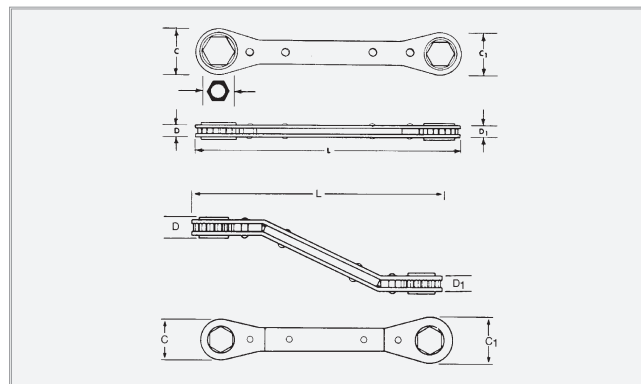


REFRIGERATION RATCHETING BOX WRENCH

- Designed for servicing automotive, commercial, and residential air conditioners, refrigeration units and freezers.
- Hex openings are used for packing gland fittings, mounting bolts, clutch bolts, tubing fittings, dust cap nuts and oil check plugs.
- Square openings are used on male service valves, plug fittings, compressor valves and refrigerant charging tanks.

Product ID No.	in.	in.	L	Weight lbs.
1111	1/4"-3/16" Sq.	9/16"-1/2" Hex.	6-3/4"	.50
1112	3/8"-5/16" Sq.	1/4"-3/16" Hex.	5 1/2"	.25

REFERENCE MEASUREMENT KEY





RATCHETING BOX WRENCHES—6 POINT

Product ID No.	in.	C	D	C1	D1	L	Weight lbs.
1191-A	1/4" x 5/16"	9/16"	3/8"	5/8"	3/8"	4-9/32"	.12
1193-A	1/2" x 9/16"	1"	1/2"	1-1/8"	1/2"	6-3/4"	.29

Fed'l Specs.: GGG-W-636E



METRIC RATCHETING BOX WRENCHES—6 POINT

Product ID No.	mm	C	D	C1	D1	L	Weight lbs.
1191M-A	7 x 8	15.0	7.5	16.3	9.5	109.0	55
1192M-A	9 x 10	19.8	7.5	22.6	9.5	140.2	77
1193MA-A	11 x 13	25.4	10.3	29.0	12.7	173.0	163
1194MA-A	12 x 14	25.4	10.3	29.0	12.7	235.0	173



RATCHETING BOX WRENCHES—12 POINT

Product ID No.	in.	C	D	C1	D1	L	Weight lbs.
1192T-A*	3/8" x 7/16"	3/4"	3/8"	7/8"	3/8"	5-1/2"	.17
1193T-A*	1/2" x 9/16"	1"	1/2"	1-1/8"	1/2"	6-3/4"	.29
1194-A*	5/8" x 11/16"	1-3/16"	1/2"	1-5/16"	1/2"	8-7/64"	.44
1196-A*	5/8" x 3/4"	1-3/8"	1/2"	1-3/8"	1/2"	8-1/8"	.47
1195-A*	3/4" x 7/8"	1-5/16"	1/2"	1-37/64"	1/2"	9-1/4"	.52
1197-A*	13/16" x 15/16"	1-5/16"	1/2"	1-37/64"	1/2"	9-1/4"	.52
1198-A	1" x 11/16"	1-29/32"	1/2"	2-1/4"	1/2"	15"	.56
1199-A	1-1/8" x 11/4"	1-29/32"	1/2"	2-1/4"	1/2"	15"	.60

*Fed'l Specs.: GGG-W-001405



METRIC RATCHETING BOX WRENCHES—12 POINT

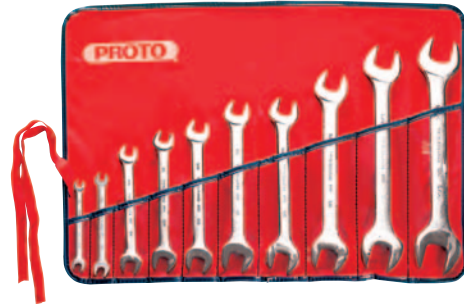
Product ID No.	mm	C	D	C1	D1	L	Weight lbs.
1195M	15 x 17	32.9	10.3	36.5	12.7	206.0	191
1196M	16 x 18	32.9	10.3	36.5	12.7	206.0	259
1197M	19 x 21	35.7	10.3	39.7	12.7	234.7	295



OFFSET RATCHETING BOX WRENCHES—12 POINT

• Box ends offset 25°.

Product ID No.	in.	C	D	C1	D1	L	Weight lbs.
1182T	3/8" x 7/16"	25/32"	3/8"	7/8"	3/8"	5-1/4"	.21
1183T	1/2" x 9/16"	1"	1/2"	1"	1/2"	6-1/2"	.43
1184	5/8" x 11/16"	1-19/64"	1/2"	1-7/16"	1/2"	7-3/4"	.58
1186	5/8" x 3/4"	1-19/64"	1/2"	1-7/16"	1/2"	7-3/4"	.58
1185	3/4" x 7/8"	1-13/32"	1/2"	1-9/16"	1/2"	8-7/8"	.774

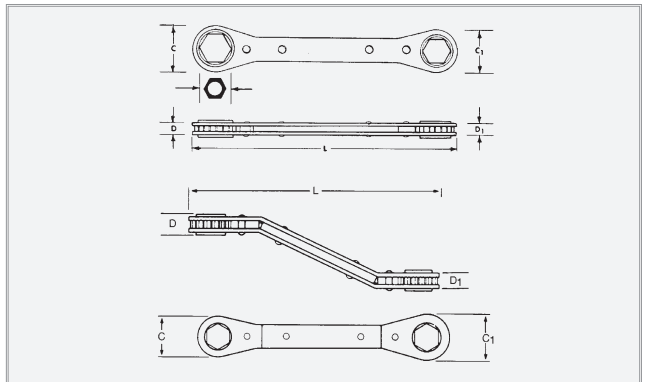


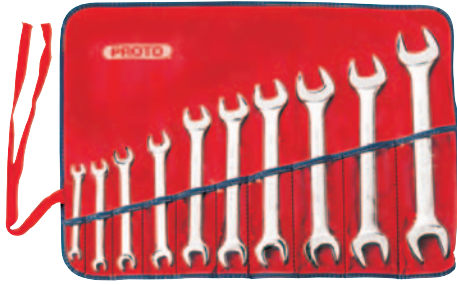
**SET NO. 3000H
10 PC. OPEN END WRENCH SET**

- Satin finish.
- 15° angle heads.
- Weight: 4.82 lbs.

Product ID No.	Contents	in.	Length
3000H	3018	1/4" x 5/16"	4-31/64"
	3020	5/16" x 3/8"	5-1/8"
	3025	7/16" x 1/2"	6-3/8"
	3026	1/2" x 9/16"	7"
	3030	9/16" x 5/8"	7-5/8"
	3031	5/8" x 3/4"	8-9/16"
	3035	11/16" x 3/4"	8-7/8"
	3040	13/16" x 7/8"	10-1/8"
	3045	15/16" x 1"	11-23/64"
	3050	1-1/16" x 1-1/8"	12-5/8"
2406	Tool Roll		

REFERENCE MEASUREMENT KEY





SET NO. 30000A 10 PC. **METRIC** OPEN END WRENCH SET

- Satin finish.
- 15° angle heads.
- Weight: 3.93 lbs.

Product ID No.	Contents	mm	Length
30000A	30607	6 x 7	114.3
	30809	8 x 9	130.1
	31011	10 x 11	146.1
	31213	12 x 13	161.9
	31415	14 x 15	193.0
	31617	16 x 17	209.0
	31819	18 x 19	225.0
	32022	20 x 22	241.0
	32123	21 x 23	257.2
	32426	24 x 26	288.9
	2414	Tool Roll	



SET NO. 30000R 6 PC. **METRIC** OPEN END WRENCH SET

- Satin finish.
- 15° angle heads.
- Weight: 1.63 lbs.

Product ID No.	Contents	mm	Length
30000R	30809	8 x 9	130
	31011	10 x 11	146
	31213	12 x 13	162
	31415	14 x 15	193
	31617	16 x 17	207
	31819	18 x 19	225
	2407	Tool Roll	



SET NO. 3300A 9 PC. **SHORT ANGLE** OPEN END WRENCH SET

- Satin finish.
- 15° and 75° angle heads.
- Weight: .46 lbs.

Product ID No.	Contents	15° x 75° in.	Length
3300A	3314	7/32" x 7/32"	3"
	3315	15/64" x 15/64"	3"
	3316	1/4" x 1/4"	3"
	3318	9/32" x 9/32"	3-1/2"
	3320	5/16" x 5/16"	3-1/2"
	3322	11/32" x 11/32"	3-3/4"
	3324	3/8" x 3/8"	3-3/4"
	3328	7/16" x 7/16"	4-1/2"
	3332	1/2" x 1/2"	4-1/2"
	2410	Tool Roll	



SET NO. 3000N 5 PC. **OPEN END** WRENCH SET

- Satin finish.
- 15° angle heads.
- Weight: 1.66 lbs.

Product ID No.	Contents	in.	Length
3000N	3021	3/8" x 7/16"	5-3/4"
	3026	1/2" x 9/16"	7"
	3030	9/16" x 5/8"	7-5/8"
	3035	11/16" x 3/4"	8-7/8"
	3040	13/16" x 7/8"	10-1/8"
	2409	Tool Roll	



OPEN END WRENCHES

- Satin finish.
- 15° angle heads.

Product ID No.	in.	B	C	D	B1	C1	D1	L	Weight lbs.
3016*	3/16" x 1/4"	17/64"	1/2"	5/32"	1/4"	7/16"	5/32"	3-7/8"	.03
3018*	1/4" x 5/16"	3/8"	21/32"	3/16"	19/64"	35/64"	5/32"	4-31/64"	.06
3020*	5/16" x 3/8"	7/16"	25/32"	13/64"	3/8"	41/64"	13/64"	5-1/8"	.08
3021*	3/8" x 7/16"	23/64"	29/32"	7/22"	7/16"	25/32"	7/32"	5-3/4"	.12
3025*	7/16" x 1/2"	19/32"	1-1/32"	1/4"	29/32"	29/32"	1/4"	6-3/8"	.16
3026*	1/2" x 9/16"	43/64"	1-3/16"	17/64"	19/32"	1-1/32"	17/64"	7"	.22
3031*	5/8" x 3/4"	29/32"	1-37/64"	5/16"	47/64"	1-5/32"	5/16"	8-9/16"	.38
3035*	11/16" x 3/4"	29/32"	1-37/64"	21/64"	53/64"	1-13/32"	21/64"	8-7/8"	.44
3037*	11/16" x 25/32"	57/64"	1-37/64"	21/64"	53/64"	1-13/32"	21/64"	8-7/8"	.40
3039*	3/4" x 7/8"	3/64"	1-25/32"	11/32"	29/32"	1-37/64"	11/32"	9-1/2"	.50
3040*	13/16" x 7/8"	1-3/64"	1-25/32"	23/64"	63/64"	1-21/32"	23/64"	10-1/8"	.61
3045*	15/16" x 1"	1-13/64"	2-1/64"	13/32"	1-1/8"	1-29/32"	13/32"	11-23/64"	.88
3050*	1-1/16" x 11/8"	1-23/64"	2-17/64"	29/64"	1-9/32"	2-5/32"	29/64"	12-5/8"	1.20
3051*	1-1/16" x 11/4"	1-31/64"	2-33/64"	15/32"	1-9/32"	2-5/32"	15/32"	13-9/16"	1.47
3055*	1-1/4" x 15/16"	1-9/16"	2-21/32"	33/64"	1-31/64"	2-33/64"	33/64"	14-1/2"	1.87
3060*	1-3/8" x 17/16"	1-23/32"	2-57/64"	35/64"	1-41/64"	2-23/32"	35/64"	15-3/4"	2.48
3070*	1-1/2" x 15/8"	1-15/16"	3-17/64"	39/64"	1-25/32"	2-61/64"	39/64"	17"	3.07
3075	1-11/16" x 113/16"	2-3/16"	3-41/64"	45/64"	2"	3-25/64"	45/64"	18-1/2"	4.56
3080	1-7/8" x 2"	2-3/8"	4-1/32"	49/64"	2-11/64"	3-41/64"	45/64"	20"	5.92

Fed'l Specs.: GGG-W-636E
*ANSI Spec.: B107.6



SHORT ANGLE OPEN END WRENCHES

- Satin finish.
- 15° and 75° angle heads.

Product ID No.	15°	75°	B	C	D	B1	C1	D1	L	Weight lbs.
3314	7/32"	7/32"	11/64"	1/2"	7/64"	11/64"	1/2"	7/64"	3-1/4"	.02
3315	15/64"	15/64"	11/64"	1/2"	7/64"	11/64"	1/2"	7/64"	31/4"	.02
3316	1/4"	1/4"	11/64"	1/2"	7/64"	11/64"	1/2"	7/64"	3-1/4"	.02
3318	9/32"	9/32"	31/64"	19/32"	5/32"	31/64"	19/32"	5/32"	3-5/8"	.03
3320	5/16"	5/16"	31/64"	19/32"	5/32"	31/64"	19/32"	5/32"	3-5/8"	.03
3322	11/32"	11/32"	1/4"	3/4"	5/32"	1/4"	3/4"	5/32"	4"	.04
3324	3/8"	3/8"	1/4"	3/4"	5/32"	1/4"	3/4"	5/32"	4"	.04
3328	7/16"	7/16"	11/32"	1"	11/64"	11/32"	1"	11/64"	4-3/4"	.07
3332	1/2"	1/2"	11/32"	1"	11/64"	11/32"	1"	11/64"	4-3/4"	.07
3336	9/16"	9/16"	13/32"	1-5/32"	31/64"	13/32"	1-5/32"	31/64"	5-3/4"	.10
3340	5/8"	5/8"	13/32"	1-5/32"	31/64"	13/32"	1-5/32"	31/64"	5-3/4"	.10



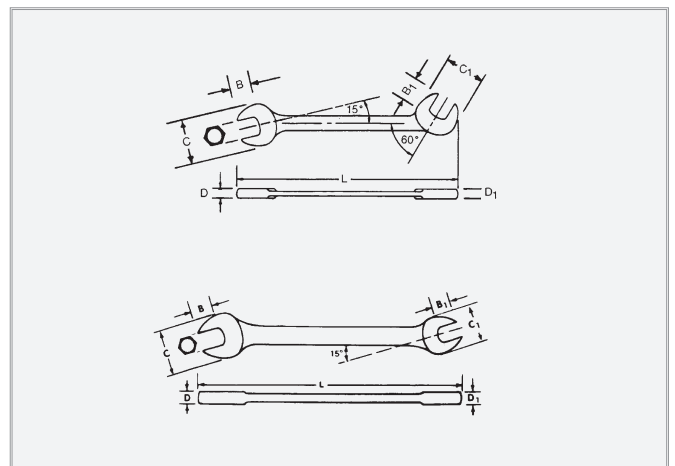
METRIC OPEN END WRENCHES

- Satin finish.
- 15° angle heads.

Product ID No.	mm	B	C	D	B1	C1	D1	L	Weight lbs.
30607	6 x 7	9.5	16.3	4.4	7.5	12.7	4.4	114.3	.06
30809	8 x 9	11.1	19.8	4.7	9.5	16.7	4.7	130.1	.09
31011	10 x 11	13.5	23.0	5.6	11.5	19.8	5.6	146.1	.13
31213	12 x 13	15.1	26.2	6.4	13.5	23.0	6.4	161.9	.15
31415	14 x 15	19.1	32.5	7.1	17.4	29.0	7.1	193.0	.29
31617	16 x 17	22.6	35.7	7.5	19.1	32.5	7.5	209.0	.28
31819	18 x 19	23.0	40.1	8.3	21.0	35.8	8.3	225.0	.42
32022	20 x 22	26.6	46.1	8.7	23.0	40.0	8.7	241.0	.55
32123	21 x 23	26.6	45.2	9.1	25.0	42.0	9.1	257.2	.58
32426	24 x 36	30.5	51.2	10.3	28.5	48.5	10.3	288.9	.87

ANSI Spec.: B107.6


REFERENCE MEASUREMENT KEY





SET NO. 3100B 14 PC. ANGLE OPEN END WRENCH SET



- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- 15° and 60° angle heads.
- Weight: 5.58 lbs.

Product ID No.	Contents	15° x 60°  in.	Length
3100B	3112	3/8" x 3/8"	4-3/4"
	3114	7/16" x 7/16"	5"
	3116	1/2" x 1/2"	5-1/4"
	3118	9/16" x 9/16"	5-5/8"
	3120	5/8" x 5/8"	6"
	3122	11/16" x 11/16"	6-1/2"
	3124	3/4" x 3/4"	7"
	3126	13/16" x 13/16"	7-1/2"
	3128	7/8" x 7/8"	8"
	3130	15/16" x 15/16"	8-3/4"
	3132	1" x 1"	9-1/2"
	3134	1-1/16" x 1-1/16"	10-1/4"
	3136	1-1/8" x 1-1/8"	11"
	3140	1-1/4" x 1-1/4"	12-1/4"
	2415	Tool Roll	



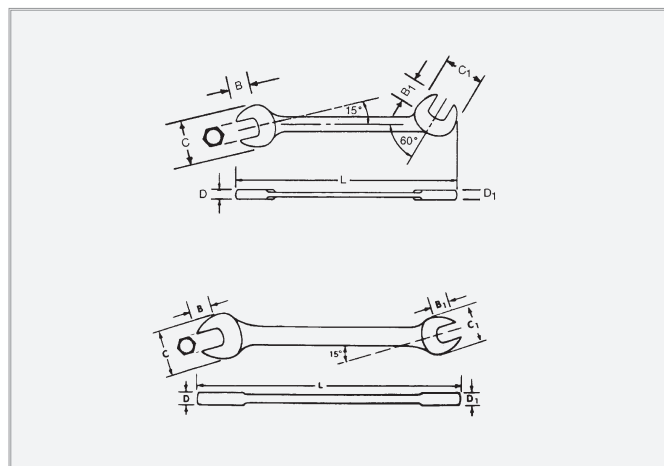
ANGLE OPEN END WRENCHES

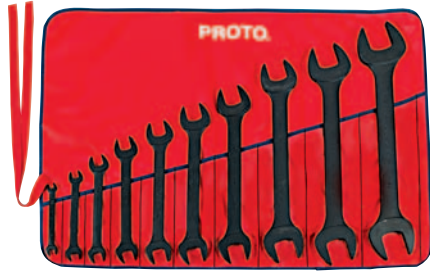
- Full polish finish. Double nickel strike for rust resistance and prolonged life.
- 15° and 60° angle heads allow wrench to be used in four different turning angles for greater access in tight work areas..

Product ID No.	15° 	60° 	B	C	D	B1	C1	D1	L	Weight lbs.
3112*	3/8"	3/8"	13/32"	4-9/64"	13/64"	13/32"	4/64"	13/64"	3-1/4"	.08
3114	7/16"	7/16"	15/32"	7/8"	13/64"	15/32"	7/8"	13/64"	5"	.12
3116*	1/2"	1/2"	35/64"	1"	15/64"	35/64"	1"	15/64"	3-1/4"	.16
3118	9/16"	9/16"	39/64"	1-7/64"	15/64"	39/64"	1-7/64"	15/64"	5-5/8"	.22
3120	5/8"	5/8"	21/32"	1-7/32"	17/64"	21/32"	1-7/32"	17/64"	3-1/4"	.28
3122*	11/16"	11/16"	23/32"	1-21/64"	17/64"	23/32"	1-21/64"	17/64"	6-1/2"	.36
3124	3/4"	3/4"	25/32"	1-7/16"	9/32"	25/32"	1-7/16"	9/32"	3-5/8"	.44
3126	13/16"	13/16"	27/32"	1-9/16"	19/64"	27/32"	1-9/16"	19/64"	7-1/2"	.50
3128	7/8"	7/8"	57/64"	1-21/32"	5/16"	57/64"	1-21/32"	5/16"	3-5/8"	.61
3130	15/16"	15/16"	31/32"	125/32"	21/64"	31/32"	125/32"	21/64"	83/4"	.71
3132	1"	1"	1-1/32"	1-59/64"	11/32"	1-1/32"	1-59/64"	11/32"	4"	.88
3134	1-1/16"	1-1/16"	1-1/16"	2-1/64"	23/64"	1-1/16"	2-1/64"	23/64"	101/4"	1.04
3136	1-1/8"	1-1/8"	1-1/8"	2-1/8"	3/8"	1-1/8"	2-1/8"	3/8"	4"	1.20
3140	1-1/4"	1-1/4"	1-1/4"	2-11/32"	13/32"	11/4"	2-11/32"	13/32"	4-3/4"	1.47
3142	1-5/16"	1-5/16"	1-5/16"	2-29/64"	27/64"	1-5/16"	2-29/64"	27/64"	13-1/8"	1.87
3144	1-3/8"	1-3/8"	1-13/32"	2-37/64"	7/16"	1-13/32"	2-37/64"	7/16"	43/4"	2.17
3146	1-7/16"	1-7/16"	1-13/32"	2-5/8"	-29/64"	1-13/32"	2-5/8"	29/64"	14"	2.48
3148	1-1/2"	1-1/2"	1-31/64"	2-3/4"	15/32"	1-31/64"	2-3/4"	15/32"	5-3/4"	2.77
3152*	1-5/8"	1-5/8"	1-43/64"	3-1/64"	1/2"	1-43/64"	3-1/64"	1/2"	15"	3.07
3156*	1-3/4"	1-3/4"	1-31/32"	3-31/64"	33/64"	1-31/32"	3-31/64"	33/64"	5-3/4"	3.81
3158*	1-13/16"	1-13/16"	1-63/64"	3-31/64"	33/64"	1-63/64"	3-31/64"	33/64"	18-3/8"	4.56
3160*	1-7/8"	1-7/8"	2-7/32"	3-29/32"	21/32"	2-7/32"	3-29/32"	21/32"	19-3/4"	5.24
3164*	2"	2"	2-9/32"	3-29/32"	21/32"	29/32"	3-29/32"	21/32"	21-1/4"	5.92

*Fed'l Specs.: GGG-W-636E

REFERENCE MEASUREMENT KEY





SET NO. 3000HB
10 PC. PROTOBLACK™ OPEN END WRENCH SET

- Black oxide finish.
- 15° angle heads.
- Weight: 12.62 lbs.

Product ID No.	Contents	in.	Length
3000HB	3020B	5/16" x 3/8"	5-1/4"
	3025B	7/16" x 1/2"	6-7/16"
	3030B	9/16" x 5/8"	7-47/64"
	3035B	11/16" x 3/4"	8-63/64"
	3040B	13/16" x 7/8"	10-15/64"
	3045B	15/16" x 1"	11-31/64"
	3050B	11/16" x 11/8"	12-3/8"
	3055B	11/4" x 15/16"	14-5/8"
	3060B	13/8" x 17/16"	15-7/8"
	3070B	11/2" x 15/8"	17-1/16"
	2444	Tool Roll	

PROTOBLACK™ OPEN END WRENCHES

- Black oxide finish.
- 15° angle heads.

Product ID No.	in.	B	C	D	B1	C1	D1	L	Weight lbs.
3020B	5/16"x3/8"	7/16"	25/32"	3/16"	7/32"	21/32"	3/16"	5-1/4"	.08
3021B	3/8"x7/16"	3/64"	29/32"	7/32"	29/64"	25/32"	7/32"	5-7/8"	.12
3025B	7/16"x1/2"	39/64"	1-1/32"	15/64"	35/64"	29/32"	15/64"	6-7/16"	.16
3026B	1/2"x9/16"	11/16"	1-3/16"	1/4"	19/32"	1-1/32"	1/4"	7-7/64"	.22
3030B	9/16"x5/8"	3/4"	1-9/32"	17/64"	1-1/16"	1-5/32"	17/64"	7-47/64"	.28
3031B	5/8"x3/4"	29/32"	1-37/64"	19/64"	3/4"	1-5/32"	19/64"	8-43/64"	.38
3035B	11/16"x3/4"	29/32"	1-37/64"	5/16"	13/16"	1-13/32"	5/16"	8-63/64"	.44
3039B	3/4"x7/8"	1-3/64"	1-17/64"	21/64"	29/32"	1-37/64"	21/64"	9-39/64"	.50
3040B	13/16"x7/8"	1-3/64"	1-25/32"	23/64"	61/64"	1-31/32"	23/64"	10-15/64"	.61
3045B	15/16"x1"	1-13/64"	2-1/64"	31/64"	1-1/8"	1-29/32"	31/64"	11-31/64"	.88
3050B	1-1/16"x1-1/8"	1-23/64"	2-17/64"	7/16"	1-15/64"	2-9/64"	7/16"	12-3/8"	1.20
3051B	1-1/16"x1-1/4"	1-1/2"	2-33/64"	29/64"	1-9/32"	2-9/64"	29/64"	13-43/64"	1.47
3055B	1-1/4"x1-5/16"	1-37/64"	2-41/64"	1/2"	1-1/2"	2-33/64"	1/2"	14-5/8"	1.87
3060B	1-3/8"x1-7/16"	1-47/64"	2-57/64"	17/32"	1-21/32"	2-23/32"	17/32"	15-7/8"	2.48
3070B	1-1/2"x1-5/8"	1-61/64"	3-1/64"	39/64"	1-51/64"	2-61/64"	39/64"	17-1/16"	3.07

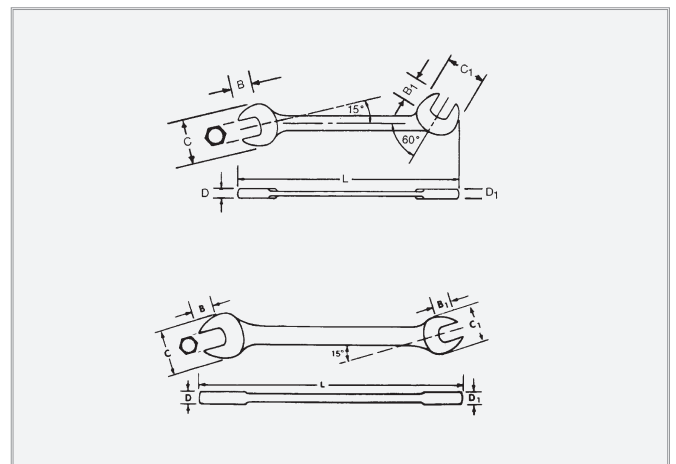


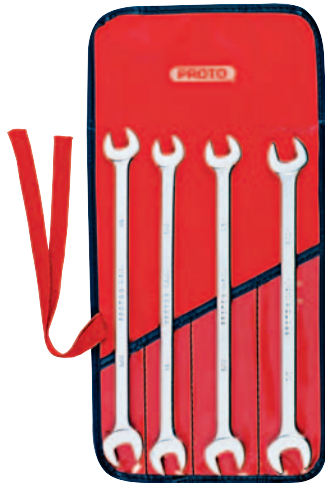
SET NO. 3000NB
5 PC. PROTOBLACK™ OPEN END WRENCH SET

- Black oxide finish.
- 15° angle heads.
- Weight: 1.88 lbs.

Product ID No.	Contents	in.	Length
3000NB	3020B	5/16" x 3/8"	5-1/4"
	3025B	7/16" x 1/2"	6-7/16"
	3030B	9/16" x 5/8"	7-47/64"
	3035B	11/16" x 3/4"	8-63/64"
	3040B	13/16" x 7/8"	10-15/64"
	2409	Tool Roll	

REFERENCE MEASUREMENT KEY





SET NO. 3400G 4 PC. EXTRA THIN OPEN END WRENCH SET

- "Tappet" style wrench ideal for use on jam nuts and in confined areas.
- 15° angle heads.
- Weight: .96 lbs.

Product ID No.	Contents	in.	Length
3400G	3425	7/16" x 1/2"	10"
	3426	1/2" x 9/16"	10" (two pieces per set)
	3430	9/16" x 5/8"	10"
	2442	Tool Roll	



EXTRA THIN OPEN END WRENCHES

- Satin finish.
- "Tappet" style wrench ideal for use on jam nuts and in confined areas.
- 15° angle heads.

Product ID No.	in.	B	C	D	B1	C1	D1	L	Weight lbs.
3425	7/16" x 1/2"	1932"	1-332"	1164"	3364"	1-164"	1164"	10"	.16
3426	1/2" x 9/16"	4364"	1-1364"	1164"	1932"	1-964"	1164"	10"	.16
3430	9/16" x 5/8"	4764"	1-2164"	1164"	4364"	1-14"	1164"	10"	.21
3435	11/16" x 3/4"	5764"	1-716"	1364"	1316"	1-1132"	1364"	10"	.26
3440	13/16" x 7/8"	1-132"	1-4964"	1364"	3132"	1-1116"	1364"	10"	.33



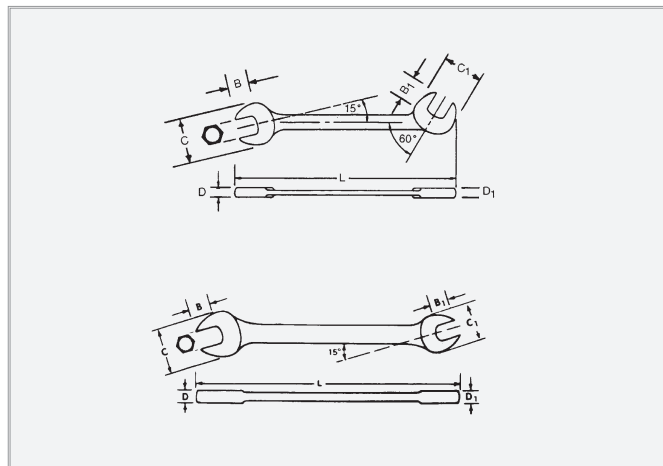
SERVICE WRENCH

- 30° angle heads.
- Thin pattern for use on jam nuts and in confined areas.

Product ID No.	in.	C	D	L	lbs.
3524	3/4"	1-11/16"	1/4"	6-1/4"	.22
3526	13/16"	1-11/16"	1/4"	6-1/4"	.22
3528	7/8"	1-11/16"	1/4"	6-1/4"	.22
3530	15/16"	1-7/8"	1/4"	6-7/8"	.25
3532	1"	1-7/8"	1/4"	6-7/8"	.25
3534	1-1/16"	1-7/8"	1/4"	6-7/8"	.25
3536	1-1/8"	2-1/16"	1/4"	7"	.31
3538	1-3/16"	2-1/16"	1/4"	7"	.31
3540	1-1/4"	2-1/16"	1/4"	7"	.30
3542	1-5/16"	2-1/2"	9/32"	7-5/8"	.45
3544	1-3/8"	2-1/2"	9/32"	7-5/8"	.44
3546	1-7/16"	2-1/2"	9/32"	7-5/8"	.43
3548	1-1/2"	2-1/2"	9/32"	7-5/8"	.42
3550	1-9/16"	2-5/8"	9/32"	7-5/8"	.43
3552	1-5/8"	2-5/8"	9/32"	7-5/8"	.43
3554	1-11/16"	2-5/8"	9/32"	7-5/8"	.42
3556	1-3/4"	3-1/8"	5/16"	8-1/2"	.70
3558	1-13/16"	3-1/8"	5/16"	8-1/2"	.69
3560	1-7/8"	3-1/8"	5/16"	8-1/2"	.69
3562	1-15/16"	3-1/8"	5/16"	8-1/2"	.68
3564	2"	3-1/2"	5/16"	8-1/2"	.66
3568	2-1/8"	3-1/2"	5/16"	8-1/2"	.65
3572	2-1/4"	3-1/2"	5/16"	8-1/2"	.61
3576	2-3/8"	3-1/2"	5/16"	9-1/2"	.61
3580	2-1/2"	3-1/2"	5/16"	9-1/2"	.59
3582	2-8/16"	3-1/2"	5/16"	9-1/2"	.57

Fed'l Specs.: GGG-W-636E

REFERENCE MEASUREMENT KEY





SET NO. 3700AT
7 PC. COMBINATION
FLARE NUT WRENCH SET—12 POINT

- Satin finish.
- Weight: 2.24 lbs.



Product ID No.	Contents	in.	Length
3700AT	3751T	3/8"	5-11/16"
	3752T	7/16"	6-1/32"
	3753T	1/2"	6-7/16"
	3754T	9/16"	6-15/16"
	3755T	5/8"	7-5/8"
	3756T	11/16"	8-11/16"
	3757T	3/4"	9-3/16"
2404	Tool Roll		



SET NO. 3760T
3 PC. DOUBLE END
FLARE NUT WRENCH SET—12 POINT

- Satin finish.
- Weight: .97 lbs.

Product ID No.	Contents	in.	Length
3760T	3764T	3/8" x 7/16"	6-1/4"
	3768T	1/2" x 9/16"	7-1/2"
	3772T	5/8" x 11/16"	8-3/4"
	2437	Tool Roll	



SET NO. 3700A
7 PC. COMBINATION
FLARE NUT WRENCH SET—6 POINT

- Satin finish.
- Weight: 2.24 lbs.



Product ID No.	Contents	in.	Length
3700A	3751	3/8"	5-11/16"
	3752	7/16"	6-1/32"
	3753	1/2"	6-7/16"
	3754	9/16"	6-15/16"
	3755	5/8"	7-5/8"
	3756	11/16"	8-11/16"
	3757	3/4"	9-3/16"
2404	Tool Roll		



SET NO. 3760
3 PC. DOUBLE END
FLARE NUT WRENCH SET—6 POINT

- Satin finish.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.
- Weight: .97 lbs.



Product ID No.	Contents	in.	Length
3760	3764	3/8" x 7/16"	6-1/4"
	3768	1/2" x 9/16"	7-1/2"
	3772	5/8" x 11/16"	8-3/4"
	2437	Tool Roll	



COMBINATION FLARE NUT WRENCHES—12 POINT

- Satin finish.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	in.	A	C	D	A1	C1	D1	L	Weight lbs.
3753T	1/2"	2564"	3132"	3/8"	1932"	1-132"	1332"	6-7/16"	.22
3754T	9/16"	2964"	1-364"	7/16"	4364"	1-1164"	1532"	6-15/16"	.27
3755T	5/8"	3364"	1-332"	7/16"	4764"	1-1964"	1532"	7-5/8"	.34
3756T	11/16"	916"	1-316"	1/2"	5164"	1-1332"	1732"	8-11/16"	.44
3757T	3/4"	916"	1-732"	1/2"	5764"	1-916"	1732"	9-3/16"	.49



METRIC DOUBLE END FLARE NUT WRENCHES—12 POINT

- Satin finish.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	mm	A	C	D	A1	C1	D1	L	Weight lbs.
3707MT	7 x 8	5.7	17.2	7.5	5.9	18.9	8.3	144.5	.11
3709MT	9 x 11	7.1	20.7	9.2	8.9	23.2	10.0	160.3	.16
3710MT	10 x 12	7.1	22.0	10.0	8.9	24.4	10.0	176.3	.21
3713MT	13 x 14	9.6	25.7	10.0	11.2	27.6	11.7	192.0	.24
3715MT	15 x 17	11.2	28.2	11.7	12.8	30.0	12.5	203.0	.33
3716MT	16 x 18	12.8	28.8	11.7	14.5	31.2	13.2	223.8	.36



COMBINATION FLARE NUT WRENCHES—6 POINT

- Satin finish.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	in.	A	C	D	A1	C1	D1	L	Weight lbs.
3751	3/8"	1964"	2532"	11/32"	7/16"	5164"	2365"	5-11/16"	.12
3752	7/16"	2364"	7/8"	3/8"	364"	5964"	1332"	6-1/32"	.17
3753	1/2"	2564"	3132"	3/8"	1932"	1-132"	1332"	6-7/16"	.22
3754	9/16"	2964"	1-364"	7/16"	4364"	1-1164"	1532"	6-15/16"	.27
3755	5/8"	3364"	1-332"	7/16"	4764"	1-1964"	1532"	75/8"	.34
3756	11/16"	916"	1-316"	1/2"	5164"	1-1332"	1732"	8-11/16"	.44
3757	3/4"	916"	1-732"	1/2"	5764"	1-916"	1732"	9-3/16"	.49



METRIC DOUBLE END FLARE NUT WRENCHES—6 POINT

- Satin finish.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	mm	A	C	D	A1	C1	D1	L	Weight lbs.
3707M	7 x 8	5.6	17.2	7.5	5.9	18.9	8.3	144.5	.11
3709M	9 x 11	7.1	20.7	9.2	8.9	23.2	10.0	160.3	.16
3710M	10 x 12	7.1	22.0	10.0	8.9	24.4	10.0	176.3	.21
3713M	13 x 14	9.6	25.7	10.0	11.2	27.6	11.7	192.0	.24
3715M	15 x 17	11.2	28.2	11.7	12.8	30.0	12.5	203.0	.33
3716M	16 x 18	12.8	28.8	11.7	14.5	31.2	13.2	223.8	.36
3719M	19 x 21	14.5	32.5	14.0	16.0	34.9	14.7	239.7	.50

ANSI Spec.: B107.9



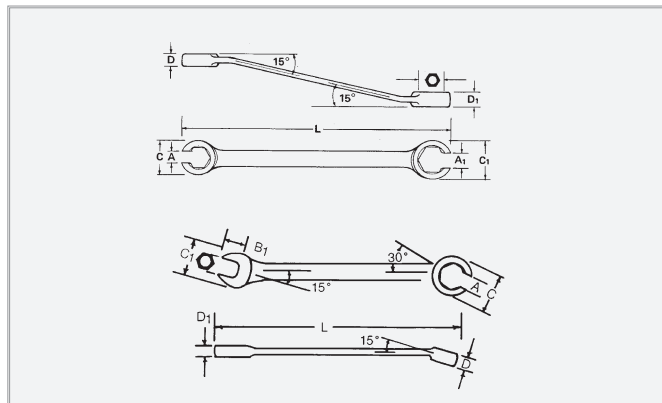
DOUBLE END FLARE NUT WRENCHES—12 POINT

- Satin finish.
- Boxed End: Torqueplus™
 - Allows up to 15% more torque to be applied to the fastener.
 - Reduces the risk of fastener rounding.
 - Provides a better grip on worn, rounded fasteners.



Product ID No.	in.	A	C	D	A1	C1	D1	L	Weight lbs.
3764T	3/8" x 7/16"	1964"	5164"	11/32"	2364"	5764"	3/8"	6-1/4"	.16
3768T	1/2" x 9/16"	2564"	3132"	3/8"	1332"	1-1/16"	7/16"	7-1/2"	.26
3772T	5/8" x 11/16"	3364"	1-764"	7/16"	3764"	1-1364"	3164"	8-3/4"	.37

REFERENCE MEASUREMENT KEY





DOUBLE END FLARE NUT WRENCHES—6 POINT

• Satin finish.



Product ID No.	in.	A	C	D	A1	C1	D1	L	Weight lbs.
3764	3/8" x 7/16"	19/64"	51/64"	11/32"	23/64"	57/64"	3/8"	6-1/4"	.16
3768	1/2" x 9/16"	25/64"	31/32"	3/8"	13/32"	1-3/64"	7/16"	7-1/2"	.26
3772	5/8" x 11/16"	33/64"	1-7/64"	7/16"	37/64"	1-13/64"	31/64"	8-3/4"	.37



SET NO. 3700M
5 PC. METRIC
DOUBLE END FLARE NUT WRENCH SET—6 POINT

• Weight: 1.25 lbs.



Product ID No.	Contents	mm	Length
3700M	3707M	7 x 8	144.5
	3709M	9 x 11	160.3
	3710M	10 x 12	176.3
	3713M	13 x 14	192.0
	3715M	15 x 17	203.0
	2409	Tool Roll	



SET NO. 3800A
7 PC. RATCHETING
FLARE NUT WRENCH SET—12 POINT

• Weight: 1.25 lbs.

Product ID No.	Contents	in.	Length
3800A	3812	3/8"	5-7/16"
	3814	7/16"	6"
	3816	1/2"	5-7/16"
	3818	9/16"	7-1/4"
	3820	5/8"	7-1/4"
	3822	11/16"	7-1/4"
	3824	3/4"	7-1/4"
	2404	Tool Roll	

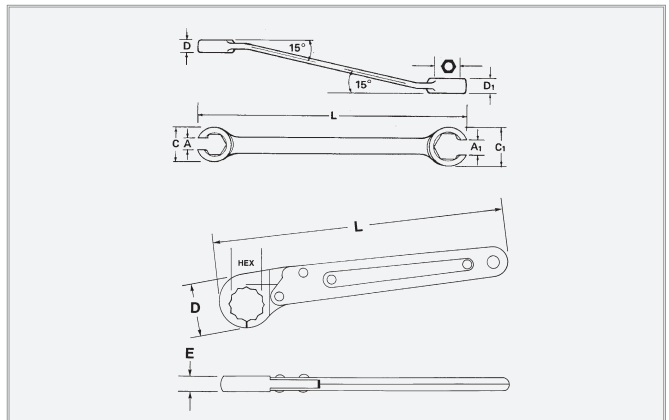


RATCHETING FLARE NUT WRENCHES—12 POINT

• Black oxide finish

Product ID No.	in.	D	E	L	Weight lbs.
3812	3/8"	1"	9/32"	5-7/16"	.16
3814	7/16"	1"	9/32"	5-7/16"	.16
3816	1/2"	1"	9/32"	5-7/16"	.16
3818	9/16"	1-5/16"	3/8"	7-1/4"	.31
3820	5/8"	1-5/16"	3/8"	7-1/4"	.31
3822	11/16"	1-5/16"	3/8"	7-1/4"	.31
3824	3/4"	1-5/16"	3/8"	7-1/4"	.31
3826	13/16"	1-11/16"	7/16"	9-3/8"	.58
3828	7/8"	1-11/16"	7/16"	9-3/8"	.58
3830	15/16"	1-11/16"	1/2"	9-3/8"	.58
3832	1"	1-11/16"	1/2"	9-3/8"	.58

REFERENCE MEASUREMENT KEY





SET NO. 795 3 PC. ADJUSTABLE WRENCH SET

• Weight: 2.6 lbs.

Product ID No.	Contents	Max.	in.	Length
795	708	1-1/8"	8"	.46
	710	1-5/16"	10"	.80
	712	1-1/2"	12"	1.34
	2484	Tool Roll		



PROTOBLACK™ ADJUSTABLE WRENCHES

- Black oxide finish.
- Extra wide jaw capacity.
- Square jaw opening provides greater strength and better fit.

Product ID No.	Max.	in.	Weight lbs.
704S	1/2"	4"	.12
706S	15/16"	6"	.25
708S	1-1/8"	8"	.48
710S	1-5/16"	10"	.80
712S	1-1/2"	12"	1.30
715S	1-11/16"	15"	3.06
718S	2-1/16"	18"	5.52
724S	2-7/16"	24"	8.59

ANSI Spec.: B107.8M



ADJUSTABLE WRENCHES

- Satin finish.
- Extra wide jaw capacity.
- Square jaw opening provides greater strength and better fit.

Product ID No.	Max.	in.	Weight lbs.
704	1/2"	4"	.12
706	15/16"	6"	.25
708	1-1/8"	8"	.48
710	1-5/16"	10"	.80
712	1-1/2"	12"	1.30
715	1-11/16"	15"	3.06
718	2-1/16"	18"	5.65
724	2-7/16"	24"	8.60

ANSI Spec.: B107.8M



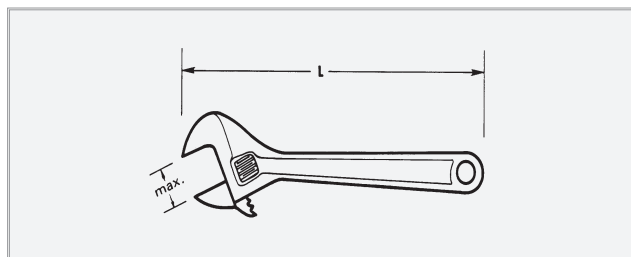
CUSHION GRIP ADJUSTABLE WRENCHES

- Extra wide jaw capacity.
- Square jaw opening provides greater strength and better fit.

Product ID No.	Max.	in.	Weight lbs.
704G	1/2"	4"	.13
706G	15/16"	6"	.25
708G	1-1/8"	8"	.48
710G	1-5/16"	10"	.80
712G	1-1/2"	12"	1.53

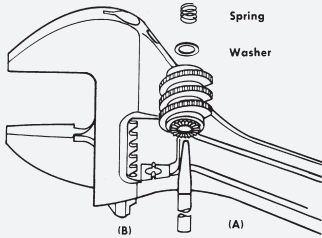
ANSI Spec.: B107.8M

REFERENCE MEASUREMENT KEY



CLIK-STOP® AUTOMATIC LOCKING ADJUSTABLE WRENCHES

- Proto CLIK-STOP® adjustable wrenches have an exclusive feature that automatically locks the movable jaw at any opening you select.
- The more pressure placed on the wrench, the tighter the jaw locks.
- When handle pressure is released the knurl turns easily.



**SET NO. 790
3 PC. CLIK-STOP® ADJUSTABLE WRENCH SET**

- Weight: 3.08 lbs.

Product ID No.	Contents	Max.	in.	Length
790	708L	1-1/8"	8"	.57
	710L	1-5/16"	10"	.93
	712L	1-1/2"	12"	1.58
	2484	Tool Roll		



ADJUSTABLE WRENCHES—CLIK-STOP®

- Extra-wide jaw capacity.
- Square jaw opening provides greater strength and better fit.

Product ID No.	Max.	in.	Weight lbs.
704L	1/2"	4"	.15
706L	5/16"	6"	.25
708L	1-1/8"	8"	.46
710L	1-5/16"	10"	.84
712L	1-1/2"	12"	1.51
715L	1-11/16"	15"	3.13
718L	2-1/16"	18"	5.73
724L	2-7/16"	24"	8.84

ANSI Spec.: B107.8M



PROTOBLACK™ ADJUSTABLE WRENCHES—CLIK-STOP®

- Black oxide finish.
- Extra-wide jaw capacity.
- Square jaw opening provides greater strength and better fit.

Product ID No.	Max.	in.	Weight lbs.
704SL	1/2"	4"	.14
706SL	5/16"	6"	.28
708SL	1-1/8"	8"	.52
710SL	1-5/16"	10"	.84
712SL	1-1/2"	12"	1.42
715SL	1-11/16"	15"	3.22
718SL	2-1/16"	18"	5.60

ANSI Spec.: B107.8M

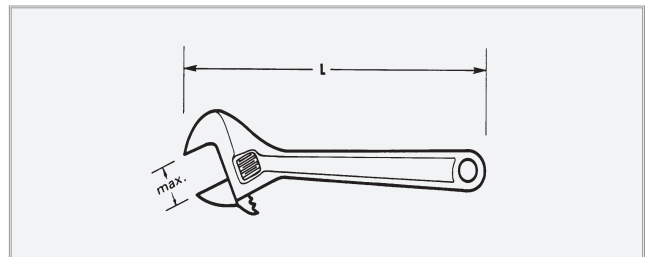


ADJUSTABLE SPUD WRENCH—CLIK-STOP®

- Large jaw opening fits all nuts and bolts up to 1 1/2 inches.
- Square jaw opening provides greater strength and better fit.
- Eliminates the need for carrying several fixed size wrenches.

Product ID No.	Max.	in.	Weight lbs.
712SC	1-1/2"	16"	2.46

REFERENCE MEASUREMENT KEY





SET NO. 3200C 13 PC. IGNITION SET

- 15° and 60° angle heads.
- Weight: .67 lbs.

Product ID No.	Contents	15° in.	60° in.	Length
3200C	3210	13/64"	15/64"	3"
	3211	15/64"	13/64"	3"
	3215	7/32"	1/4"	3"
	3216	1/4"	7/32"	3"
	3220	9/32"	5/16"	3 1/2"
	3221	5/16"	9/32"	3 1/2"
	3225	11/32"	3/8"	3 3/4"
	3226	3/8"	11/32"	3 3/4"
	000D	Ignition Gauge Set		
	235	Midget Angle Nose Pliers		
	2302	Ignition Point File		
	62-417B	Screwdriver		
	9853	Screw Starter		
	2420	Tool Roll		



SET NO. 3200D 9 PC. IGNITION SET

- 15° and 60° angle heads.
- Weight: .47 lbs.

Product ID No.	Contents	15° in.	60° in.	Length
3200D	3210	13/64"	15/64"	3"
	3211	15/64"	13/64"	3"
	3215	7/32"	1/4"	3"
	3216	1/4"	7/32"	3"
	3220	9/32"	5/16"	3-1/2"
	3221	5/16"	9/32"	3-1/2"
	3225	11/32"	3/8"	3-3/4"
	3226	3/8"	11/32"	3-3/4"
	235	Midget Angle Nose Pliers		
	2416	Tool Roll		



IGNITION WRENCHES

- Satin finish.
- 15° and 60° angle heads.

Product ID No.	15° in.	60° in.	B	C	D	B1	C1	D1	L	Weight lbs.
3210	13/64"	15/64"	7/32"	1/2"	7/64"	7/32"	1/2"	7/64"	3"	.02
3211	15/64"	13/64"	7/32"	1/2"	7/64"	7/32"	1/2"	7/64"	3"	.02
3215	7/32"	1/4"	7/32"	1/2"	7/64"	7/32"	1/2"	7/64"	3"	.02
3216	1/4"	7/32"	7/32"	1/2"	7/64"	7/32"	1/2"	7/64"	3"	.02
3220	9/32"	5/16"	1/4"	19/32"	5/32"	1/4"	19/32"	5/32"	3-1/2"	.03
3221	5/16"	9/32"	1/4"	19/32"	5/32"	1/4"	19/32"	5/32"	3-1/2"	.03
3225	11/32"	3/8"	21/64"	3/4"	5/32"	21/64"	47/64"	5/32"	3-3/4"	.04
3226	3/8"	11/32"	21/64"	3/4"	5/32"	21/64"	3/4"	5/32"	3-3/4"	.04

Fed'l Specs.: GGG-W-636E



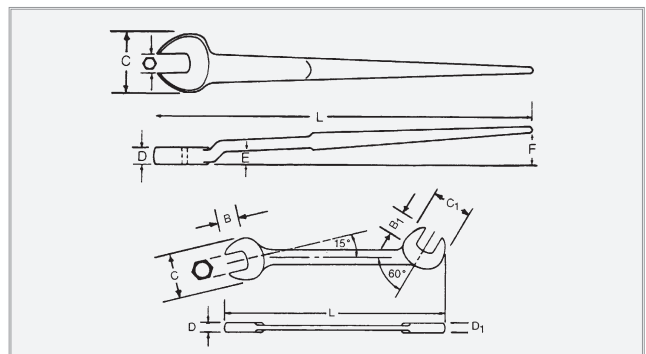
STRUCTURAL WRENCHES—OFFSET HEAD

- Black oxide finish.
- Long offset handle provides greater leverage and clearance for knuckles and obstructions.
- Hardened tapered handle aligns bolt and rivet holes.
- Openings are precision broached for proper fit.

Product ID No.	in.	C	D	E	F	L	Weight lbs.
C904A	3/4"	1-7/8"	7/16"	3/4"	2-1/4"	11-3/4"	.72
C905	7/8"	2-3/16"	9/16"	7/8"	2-1/4"	14-1/4"	1.37
C906B	1"	2-3/16"	9/16"	7/8"	2-1/4"	14-1/4"	1.34
C907	1-1/16"	2-7/16"	21/32"	1"	2-1/4"	17-1/4"	2.12
C907A	1-1/8"	2-7/16"	21/32"	1"	2-1/4"	17-1/4"	2.22
C908	1-1/4"	2-3/4"	13/16"	1-1/4"	3"	19-1/2"	2.47
C908A	1-5/16"	2-3/4"	13/16"	1-1/4"	3"	19-1/2"	2.70
C909	1-7/16"	3-1/8"	13/16"	1-1/4"	3"	19-1/2"	3.66
C909A	1-1/2"	3-1/8"	13/16"	1-1/4"	3"	19-1/2"	2.70
C910	1-5/8"	3-5/8"	15/16"	1-5/8"	3"	23-1/4"	5.68
C912	2"	4-7/16"	15/16"	1-5/8"	3"	23-1/4"	8.32

Fed'l Specs.: GGG-W-636E

REFERENCE MEASUREMENT KEY





SPUD HANDLE BOX WRENCHES—12 POINT

- Black oxide finish.
- Ideal for heavy construction and field service work.
- High leverage handle and strong box end designed to turn stubborn nuts and bolts.
- Spud end aligns flange holes.

Product ID No.	in.	C	D	E	F	L	Weight lbs.
2614	7/8"	1-11/32"	5/8"	1-3/32"	11/16"	12"	1.25
2615	15/16"	1-11/32"	5/8"	1-3/32"	11/16"	12"	1.26
2616	1"	1-9/16"	11/16"	1-5/16"	3/4"	12"	1.75
2617	1-1/16"	1-19/32"	11/16"	1-5/16"	3/4"	15"	2.01
2618	1-1/8"	1-45/64"	13/16"	1-1/16"	3/4"	15"	2.11
2620	1-1/4"	1-25/32"	13/16"	1-1/16"	3/4"	17"	2.20
2621	1-5/16"	2-1/8"	15/16"	1-3/8"	7/8"	17"	3.00
2623	1-7/16"	2-1/8"	15/16"	1-3/8"	7/8"	21"	3.00
2624	1-1/2"	2-3/16"	1"	1-1/2"	7/8"	21"	3.37
2626	1-5/8"	2-15/32"	1-1/8"	1-1/2"	7/8"	22"	3.60
2627	1-11/16"	2-15/32"	1-1/8"	1-1/2"	7/8"	22"	3.70
2629	1-13/16"	2-29/32"	1-3/16"	1-9/16"	1"	23"	5.55
2630	1-7/8"	2-29/32"	1-3/16"	1-9/16"	1"	23"	5.77
2632	2"	3-5/32"	1-5/16"	1-21/32"	1"	24-1/2"	6.00
2635	2-3/16"	3-15/32"	1-7/16"	1-7/8"	1"	26"	6.44
2638	2-3/8"	3-23/32"	1-9/16"	2"	1"	28"	7.00
2641	2-9/16"	4"	1-1/2"	2-1/4"	1-1/16"	30"	9.36
2644	2-3/4"	4"	1-1/2"	2-1/4"	1-1/16"	30"	9.19

Fed'l Specs.: GGG-W-636E

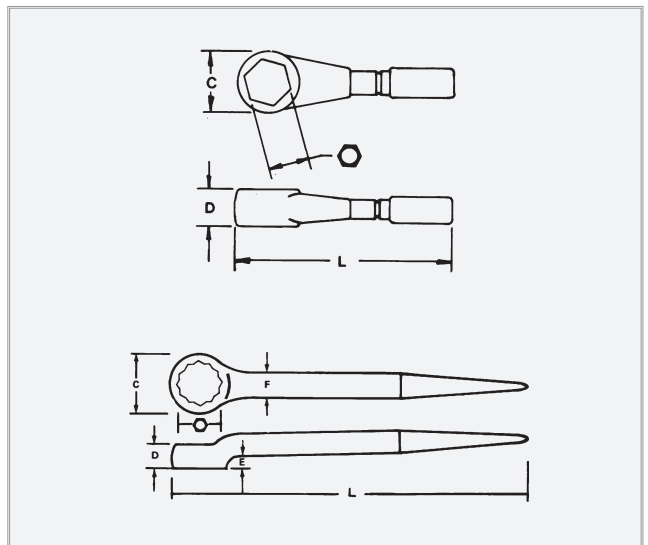
STRIKING WRENCHES HEAVY-DUTY—6 POINT

- Black oxide finish.
- Large striking surface for surer blow contact and more efficient transmittal of force to fastener.
- Short handle permits use in close quarters.
- Box opening designed to remain on fastener when wrench is struck.
- For use where extreme force is necessary to loosen or set large fasteners.
- Heavy box walls provide greater torque transmission.
- Straight handle design helps prevent the wrench from cocking when struck.

Product ID No.	in.	C	D	L	Weight lbs.
2717SW	1-1/16"	125/32"	5/8"	9-7/8"	1.62
2720SW	1-1/4"	2"	23/32"	10-1/4"	1.72
2723SW	1-7/16"	2-17/64"	7/8"	10-19/32"	2.49
2726SW	1-5/8"	2-31/64"	61/64"	10-15/16"	3.17
2729SW	113/16"	2-21/32"	63/64"	11-5/16"	3.49
2732SW	2"	3-1/32"	1-7/32"	11-21/32"	4.73
2735SW	2-3/16"	3-9/32"	1-15/64"	11-5/16"	5.33
2738SW	2-3/8"	3-13/32"	1-7/16"	12-3/8"	5.63
2741SW	2-9/16"	3-3/4"	1-17/32"	12-11/16"	6.47
2744SW	2-3/4"	4-11/64"	1-17/32"	13-1/16"	7.69
2747SW	2-15/16"	4-23/64"	1-17/32"	13-7/16"	7.53
2750SW	3-1/8"	4-31/64"	1-41/64"	13-13/16"	9.53
2756SW	3-1/2"	4-31/32"	1-23/32"	14-1/8"	10.33
2762SW	3-7/8"	5-35/64"	1-23/32"	14-1/2"	13.05

Fed'l Specs.: GGG-W-636E

REFERENCE MEASUREMENT KEY





OFFSET STRIKING WRENCHES HEAVY-DUTY—12 POINT

- Black oxide finish.
- Large striking surface for surer blow contact and more efficient transmittal of force to fastener.
- Short handle permits use in close quarters.
- Box opening designed to remain on fastener when wrench is struck.
- For use where extreme force is necessary to loosen or set large fasteners.
- Heavy box walls provide greater torque transmission.
- Offset handle clears obstructions.

Product ID No.	in.	C	D	E	L	Weight lbs.
2617SW	1-1/16"	1-11/16"	5/8"	15/16"	8-1/2"	1.79
2618SW	1-1/8"	1-11/16"	5/8"	15/16"	8-1/2"	1.75
2620SW	1-1/4"	1-7/8"	13/16"	13/16"	10-3/4"	2.95
2621SW	1-5/16"	1-7/8"	13/16"	13/16"	10-3/4"	2.89
2623SW	1-7/16"	2-3/16"	1"	1-1/2"	12"	4.53
2624SW	1-1/2"	2-3/16"	1"	1-1/2"	12"	4.53
2626SW	1-5/8"	2-13/32"	1-1/8"	1-1/2"	12-1/4"	4.58
2627SW	1-11/16"	2-13/32"	1-1/8"	1-1/2"	12-1/4"	4.44
2628SW	1-3/4"	2-19/32"	1-3/16"	1-9/16"	13-7/16"	6.58
2629SW	1-13/16"	2-21/32"	1-3/16"	1-9/16"	13-7/16"	6.51
2630SW	1-7/8"	2-27/32"	1-1/4"	1-21/32"	13-7/16"	6.58
2632SW	2"	2-27/32"	1-1/4"	1-21/32"	13-7/16"	6.60
2634SW	2-1/8"	3-1/8"	1-1/2"	2"	13-7/8"	8.62
2635SW	2-3/16"	3-3/8"	1-1/2"	2"	13-1/2"	8.38
2636SW	2-1/4"	3-3/8"	1-1/2"	2"	13-1/2"	8.38
2637SW	2-5/16"	3-3/8"	1-1/2"	2"	13-1/2"	8.06
2638SW	2-3/8"	3-3/8"	1-1/2"	2"	13-1/2"	8.08
2640SW	2-1/2"	4"	1-1/2"	2-1/4"	13-1/2"	9.52
2641SW	2-9/16"	4"	1-1/2"	2-1/4"	13-1/2"	9.52
2642SW	2-5/8"	4"	1-1/2"	2-1/4"	13-1/2"	9.63
2644SW	2-3/4"	4"	1-1/2"	2-1/4"	13-1/2"	9.04
2647SW	2-15/16"	4-7/16"	1-7/8"	2-5/8"	16"	12.64
2648SW	3"	4-7/16"	1-7/8"	2-5/8"	16"	13.13
2650SW	3-1/8"	4-7/16"	1-7/8"	2-5/8"	16"	12.72

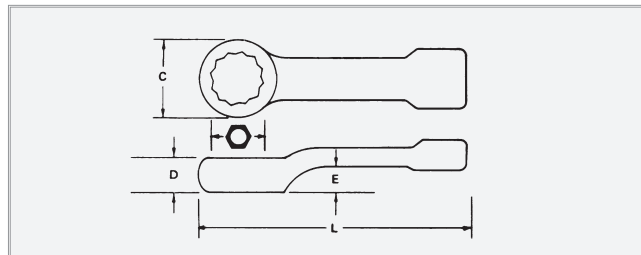
Fed'l Specs.: GGG-W-636E

METRIC OFFSET STRIKING WRENCHES HEAVY-DUTY—12 POINT

- Black oxide finish.
- Large striking surface for surer blow contact and more efficient transmittal of force to fastener.
- Short handle permits use in close quarters.
- Box opening designed to remain on fastener when wrench is struck.
- For use where extreme force is necessary to loosen or set large fasteners.
- Heavy box walls provide greater torque transmission.
- Offset handle clears obstructions.

Product ID No.	mm	C	D	E	L	Weight lbs.
2632SWM	32	48	21	30	273	.88
2636SWM	36	56	25	38	305	2.13
2641SWM	41	61	28	38	311	2.37
2646SWM	46	68	30	40	341	2.81
2650SWM	50	72	32	42	341	2.95
2655SWM	55	86	38	51	343	4.09
2660SWM	60	86	38	51	343	3.90
2665SWM	65	102	38	57	343	4.54
2670SWM	70	102	38	57	343	4.36
2675SWM	75	113	48	67	406	5.90
2680SWM	80	113	48	67	406	5.72

REFERENCE MEASUREMENT KEY





**OFFSET SLUGGING WRENCHES
SUPER HEAVY-DUTY—12 POINT**

- Designed for heavy use in close quarters where hammer or sledge is required to loosen frozen nuts or set large fasteners.
- High strength rectangular design withstands heavy sledging; transmits power more effectively to fastener.
- Box opening designed to remain in place on fastener when wrench is struck.
- Heavy box walls provide greater transmission of torque to fastener.
- Straighter handle design than striking wrenches resists springing, nut turns easier.

Product ID No.	in.	C	D	E	L	Weight lbs.
USN321	1-5/16"	2-3/8"	7/8"	1 1/16"	8-3/8"	2.03
USN323	1-7/16"	2-3/8"	7/8"	1 1/16"	8-3/8"	1.95
USN324	1-1/2"	2-3/4"	1-1/8"	1"	10"	3.54
USN326	1-5/8"	2-3/4"	1-1/8"	1"	10-1/8"	3.41
USN327	1-11/16"	2 3/4"	1-1/8"	1"	10-1/8"	3.31
USN329	1-53/64"	2-3/4"	1-1/8"	1"	10-1/8"	3.20
USN330	1-57/64"	3"	1-1/4"	1-1/8"	10-3/4"	3.92
USN332	2"	3"	1-5/16"	1-1/8"	10-3/4"	3.71
USN335	2-13/64"	3-9/16"	1-3/8"	1-1/4"	11"	5.11
USN336	2-17/64"	3-9/16"	1-3/8"	1-1/4"	11"	4.86
USN338	2-25/64"	4-1/8"	1-5/8"	1-1/2"	14-1/2"	8.75
USN340	2-33/64"	4-1/8"	1-5/8"	1-1/2"	14-1/2"	8.46
USN341	2-37/64"	4-1/8"	1-5/8"	1-1/2"	14-1/2"	8.37
USN342	2-21/32"	4-1/8"	1-5/8"	1-1/2"	14-1/2"	8.35
USN344	2-25/32"	4-1/8"	1-5/8"	1-1/2"	14-1/2"	7.80
USN347	2-31/32"	4-5/8"	1-7/8"	1-3/4"	15-3/4"	12.17
USN348	3-1/32"	4-5/8"	1-7/8"	1-3/4"	15-3/4"	12.14
USN350	3-5/32"	4-5/8"	1-7/8"	1-7/8"	15-3/4"	11.29
USN354	3-3/8"	5-1/4"	2"	1-7/8"	17-3/8"	15.41
USN356	3-17/32"	5-1/4"	2"	1-7/8"	17-3/8"	15.79
USN360	3-25/32"	5-1/2"	2-1/2"	1-7/8"	17-3/8"	22.74
USN362	3-29/32"	5-1/2"	2-1/2"	1-7/8"	18"	22.11
USN366	4-11/64"	6-1/8"	2-7/8"	1-7/8"	18"	27.92
USN368	4-19/64"	6-1/8"	2-7/8"	1-7/8"	18"	26.83
USN372	4-1/2"	6-5/8"	3"	1-7/8"	19-3/4"	32.06
USN374	4-43/64"	6-5/8"	3"	1-7/8"	19-3/4"	30.54

Fed'l Specs.: GGG-W-636E

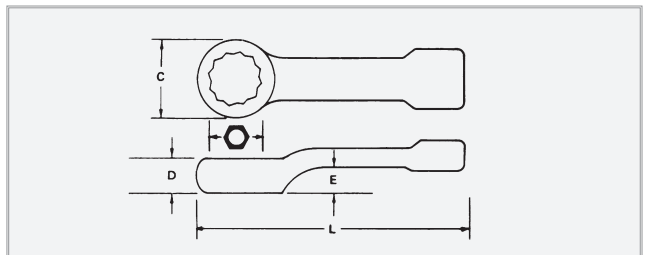
**METRIC OFFSET SLUGGING WRENCHES
SUPER HEAVY-DUTY—12 POINT**

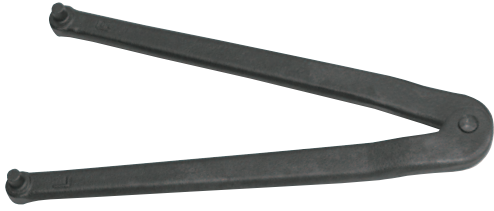
- Designed for heavy use in close quarters where hammer or sledge is required to loosen frozen nuts or set large fasteners.
- High strength rectangular design withstands heavy sledging; transmits power more effectively to fastener.
- Box opening designed to remain in place on fastener when wrench is struck.
- Heavy box walls provide greater transmission of torque to fastener.
- Straighter handle design than striking wrenches resists springing, nut turns easier.

Product ID No.	mm	C	D	E	L	Weight lbs.
HD032M	32	60	22	17	213	1.27
HD036M	36	60	22	17	213	1.27
HD041M	41	70	29	25	257	1.36
HD046M	46	70	29	25	257	1.31
HD050M	50	76	32	28	273	1.80
HD055M	55	91	35	32	279	2.27
HD060M	60	105	41	38	368	3.63
HD065M	65	105	41	38	368	3.50
HD070M	70	105	41	38	368	3.36
HD075M	75	118	48	44	400	5.44
HD080M	80	133	51	47	441	7.26
HD085M	85	133	51	47	441	6.80
HD090M	90	140	64	48	451	7.42
HD095M	95	140	64	48	451	6.98
HD100M	100	152	73	50	457	11.79
HD105M	105	152	73	50	457	11.34
HD110M	110	165	76	52	502	15.42
HD115M	115	165	76	52	502	14.97

Fed'l Specs.: GGG-W-636E

REFERENCE MEASUREMENT KEY





ADJUSTABLE FACE SPANNER

• Designed for servicing seal and packing nuts on hydraulic cylinders.

Product ID No.	Maximum Capacity	Diameter of Pin B	Length of Pin C	L	Weight lbs.
C482	2"	3/16"	1/4"	6-3/8"	.31
C483	3"	1/4"	1/4"	8-1/4"	.52
C484	4"	5/16"	1/2"	10-3/8"	1.02

Fed'l Specs.: GGG-W-665B



ADJUSTABLE HOOK SPANNER

• Designed for servicing collars, lock nut rings, and bearings

Product ID No.	Diameter Capacity	Hook Thickness D	Hook Depth C	L	Weight lbs.
C471	3/4" to 2"	11/32"	1/8"	6-3/8"	.23
C472	1-1/4" to 3"	13/32"	5/32"	8-1/8"	.43
C474	2" to 4-3/4"	15/32"	3/16"	11-3/8"	1.03
C474A	4-1/2" to 6-1/4"	15/32"	1/4"	12-1/8"	1.07
C474B	6-1/8" to 8-3/4"	15/32"	5/16"	13-3/4"	1.40

Fed'l Specs.: GGG-W-665B



ADJUSTABLE PIN SPANNER

• Designed for servicing collars and lock nut rings.

Product ID No.	Maximum Capacity	Diameter of Pin B	Length of Pin C	Hook Thickness D	L	Weight lbs.
C491	3/4" to 2"	1/8"	1/8"	11/32"	6-3/8"	.23
C492	3/4" to 2"	3/16"	5/32"	11/32"	6-3/8"	.23
C494	1-1/4" to 3"	3/16"	3/16"	13/32"	8-1/8"	.42
C495	1-1/4" to 3"	1/4"	7/32"	13/32"	8-1/8"	.42
C497	2" to 4-3/4"	1/4"	1/4"	15/32"	11-3/8"	.99
C499	4-1/2" to 6-1/4"	3/8"	1/4"	15/32"	12-1/8"	1.08

Fed'l Specs.: GGG-W-665B



PIPE WRENCHES—HEAVY-DUTY

- Forged steel jaw provides maximum strength.
- Full floating hook jaw, provides instant grip, easy release.
- Large knurl and power threads provide fast, positive jaw adjustment.

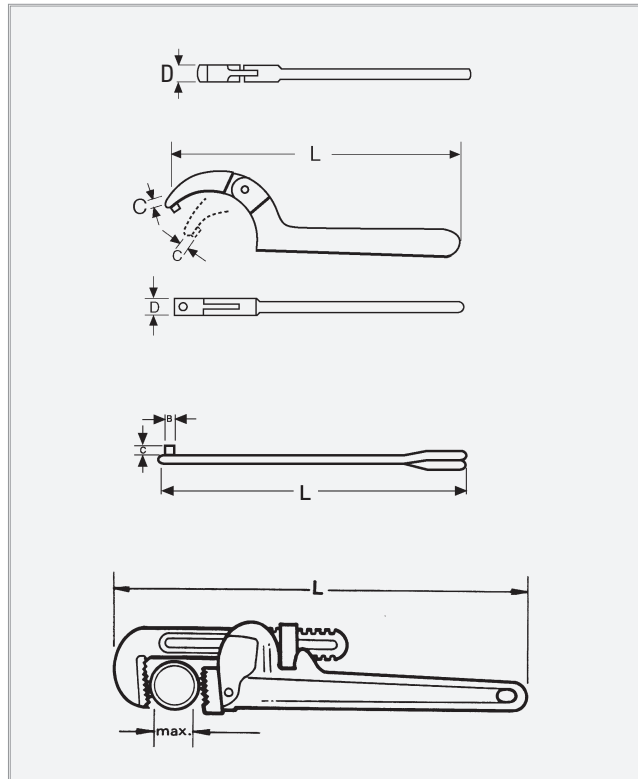
Product ID No.	Max.	L	Weight lbs.
806HD	3/4"	6"	.45
808HD	1"	8"	.87
810HD	1-1/2"	10"	1.76
812HD	2"	12"	2.75
814HD	2"	14"	3.61
818HD	3-1/2"	18"	6.02
824HD	4"	24"	9.83
836HD	5"	36"	19.07
848HD	6"	48"	34.34

Fed'l Specs.: GGG-W-00651D

PIPE WRENCH PARTS

Wrench ID No.	Handle, Heel Jaw, & Pin Assemble	Hook Jaw	Heel Jaw & Pin	Coil & Flat Spring
806HD	806H	—	—	806E
824HD	—	—	824C	—
836HD	836H	836B	836C	—
848HD	—	—	848C	—

REFERENCE MEASUREMENT KEY





UNIVERSAL CHAIN WRENCH

- Fits any shape pipe.
- Forged steel handle has deep milled teeth.
- Chain capacity rating: 6,200 lbs.

Product ID No.	Length	Length	Pipe Capacity of Diameter	Weight lbs.
801	16-1/2"	12-5/16"	7/8" to 4"	1.6
801RK	Replacement Kit (Chain and Rivet)			

Fed'l Specs.: GGG-W-00651D



**SET NO. 9500B
10 PC. SCREW EXTRACTOR SET**

- Weight: 4.5 lbs.

Product ID No.	Contents	A	L
9500B	9521	1/8"	2-5/16"
	9522	3/16"	2-5/8"
	9523	7/32"	2-7/8"
	9524	5/16"	3"
	9525	3/8"	3-1/4"
	9525B	7/16"	3-7/8"
	9526	17/32"	4-1/2"
	9527	5/8"	4-7/8"
	9528	3/4"	5-3/8"
	9529	1"	5-1/2"
	9500BPB	Blow Molded Box with drill bit slots	



**SET NO. 9500A
5 PC. SCREW EXTRACTOR SET**

- Weight: .28 lbs.

Product ID No.	Contents	A	L
9500A	9521	1/8"	2-5/16"
	9522	3/16"	2-5/8"
	9523	7/32"	2-7/8"
	9524	5/16"	3"
	9525	3/8"	3-1/4"
	Pouch		



SCREW EXTRACTORS

- Drive into end of broken pipe or fitting.
- Use tap holder or wrench on extractor to turn out broken part.
- Size stamped on extractor refers to drill bit size to be used with that extractor.

Product ID No.	U.S.S.	I.D.	D	Min.	A	B	L	Weight lbs.
9521*	1/4", 5/16"	1/8"	1/8"	3/8"	1/8"	3/16"	2-3/8"	.02
9522*	3/8"	—	3/16"	1/2"	11/64"	3/16"	2-11/16"	.02
9523†	7/16"	1/8"	15/64"	1/2"	13/64"	1/4"	2-15/16"	.04
9524*	1/2", 9/16"	1/4"	5/16"	1/2"	19/64"	5/16"	3"	.07
9525*	5/8"	3/8"	3/8"	5/8"	11/32"	3/8"	3-1/4"	.11
9525B*	3/4"	—	15/32"	11/16"	27/64"	7/16"	3-7/8"	.18
9526	7/8"	1/2"	9/16"	11/16"	1/2"	1/2"	4-1/2"	.30
9527	1", 11/8"	1/2"	21/32"	3/4"	19/32"	5/8"	4-7/8"	.47
9528	1 1/4", 1 3/8"	3/4"	13/16"	3/4"	23/32"	3/4"	5-3/8"	.71
9529*	1 1/2"	1"	11/16"	3/4"	31/32"	1"	5-1/2"	1.29

*Fed'l Specs.: GGG-W-936C
†For Broken Grease Fittings



STUD REMOVER

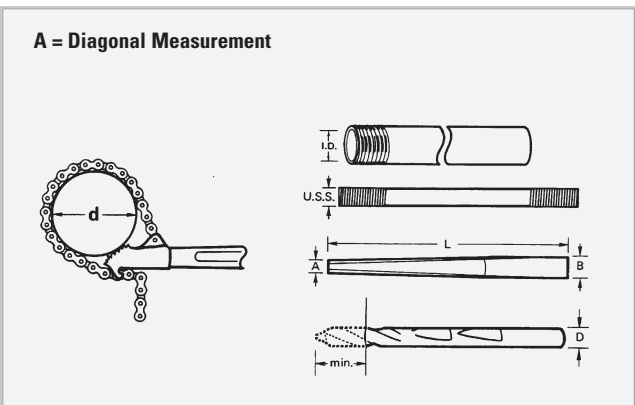
- 1/2" square drive.
- Knurled roller grips studs

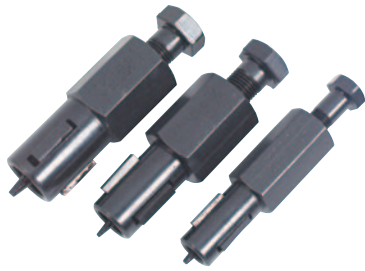
Product ID No.	Capacity	Weight lbs.
4520	1/2" to 3/4"	1.25

Fed'l Specs.: GGG-S-775A

REFERENCE MEASUREMENT KEY

A = Diagonal Measurement





SET NO. 140A 3 PC. INTERNAL PIPE WRENCH SET

• Weight: 1.49 lbs.

Product ID No.	Contents	A	L
140A	140	1/2"	3-5/8"
	141	3/4"	3-5/8"
	142	1"	3-5/8"
	Pouch		



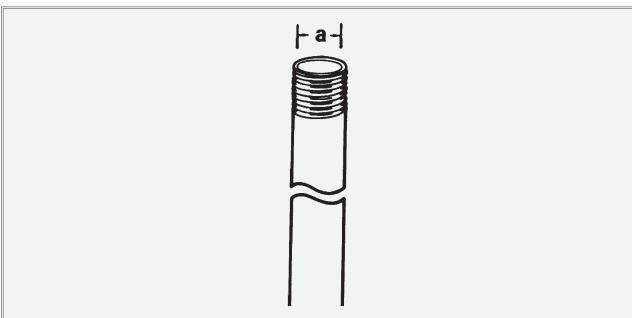
INTERNAL PIPE WRENCHES

- Screw forces jaws equally against inside surface of broken pipe or close nipples.
- Turn extractor with wrench to remove pipe quickly and safely.
- Requires no hammering to release.

Product ID No.	A	L	Weight lbs.
140	1/2"	3-5/8"	.30
141	3/4"	3-5/8"	.49
142	1"	3-5/8"	.58

Fed'l Specs.: GGG-W-643B

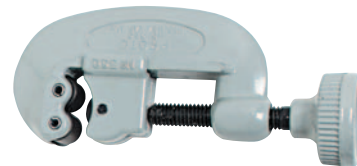
REFERENCE MEASUREMENT KEY



SET NO. 349 TUBING CUTTING AND FLARING SET

- Cuts tubing from 1/8" through 1-1/8" O.D. and puts 45° flare on tubing 3/16" through 5/8".
- Weight: 4.4 lbs.

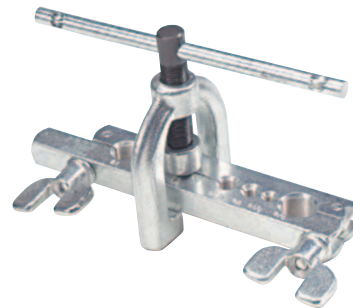
Product ID No.	Contents	Description
349	350	Tubing Center
	351V	Flaring Block
	351Y	Flaring Yoke
	4029	Steel Storage Box



TUBING CUTTER

- Cuts metal tubing from 1/8" through 1-1/8" O.D. quickly and cleanly.
- Features heat treated alloy steel cutting blade, special rollers and heavy-duty screw mounted in durable steel frame.
- Large screw-knob and retractable tubing reamer.

Product ID No.	Weight lbs.	Cutting Wheel
350	1.47	350C



TUBING FLARING TOOL

- A complete flaring tool for tubing 3/16" through 5/8" O.D.
- Includes multiple hole 45° V-block and flaring yoke with hardened, polished, ball-bearing mounted cone.
- Ideal for use on copper tubing; not recommended for use on steel applications.

Product ID No.	Weight lbs.	V-Blocks Only	Yoke Only
351	2.00	351V	351Y

Fed'l Specs.: GGG-F-451C