

HAND TOOLS

RATCHETS

Dual 80™ Technology Ratchets

Stop, Turn, and Listen. Introducing the smoothest, strongest ratchets on the planet. You have to try them to believe them.

Dual 80™ Technology Ratchets Feature:

- 80 tooth gears
- 7 teeth in contact with gear to provide strength and durability
- Ratchet Arc - Dual 80™ Technology ratchet has 25% less ratcheting arc and requires the least amount of arc to engage the next gear tooth.
- Sealed head keeps dirt and other contaminants out of the head mechanism.
- Sealed in permanent lubrication providing a smooth running ratchet without the need for routine maintenance.

There are ten U.S. patents that cover the innovative features of Snap-on ratchets.

Standard: The standard length Snap-on ratchet is the signature tool in a professional technician's tool box.

Long Handle: Increased length provides extra reach and more leverage.

Flex Head: Choose locking or spring held flex head ratchets for difficult angles and hard to reach areas.

Compact Head: Sneak into tight places with standard, flex and swivel compact head ratchets.

Bent Flex Head: Reach around obstructions with bent handle, flex head ratchets.

Short Handle: When clearance is at a premium, these excel. Enough handle to grip, not enough to get in the way.

Palm Style: Perfect for low torque, low clearance applications.

Round Head: Silky smooth gear action with fine teeth, plus the best balance of size and weight.

Swivel Head: Stand it up and use as a spinner, or flex it into tough clearance situations.

Insulating: No conductive path between the square drive and the handle. Rated for 1,000 VAC and 1,500 VDC.



SOCKETS

When you hear the Snap-on® name and you think of sockets, there is a good reason. Snap-on pioneered the whole idea of interchangeable sockets back in 1920, and ever since then we have focused on engineering and building sockets that professionals depend on to work in tighter places, deliver more turning power, and last longer.

When the U.S. government was building revolutionary military aircraft that used smaller, lightweight fasteners that carried very large torque loads, they asked Snap-on to develop sockets strong enough to do the job. Snap-on invented the Flank Drive® wrenching system to provide thin wall sockets that delivered more power without slipping or rounding.

Today, manufacturers rely on Snap-on power sockets for assembly, and technicians choose from impact sockets, flexible sockets and a wide variety of sockets for special applications every day. Snap-on continues to deliver innovative sockets such as our new tapered-hex spark plug sockets that hang onto delicate plugs without the need for bulky inserts.

Snap-on sockets are made in Milwaukee, Wisconsin by people who have spent years solving tough problems for professional tool users.



1/4" Drive General Service Sets

Inches/Metric, 6-Point

144TMPB 6-Point Fractional/Metric Set
44 Tools Include:

6-Point Shallow Sockets:		6-Point Deep Sockets:		6-Point Shallow Sockets Metric:		6-Point Deep Sockets Metric:	
TM6	3/16"	STM6	3/16"	TMM5.5	5.5mm	STMM5.5	5.5mm
TM7	7/32"	STM7	7/32"	TMM6	6mm	STMM6	6mm
TM8	1/4"	STM8	1/4"	TMM7	7mm	STMM7	7mm
TM9	9/32"	STM9	9/32"	TMM8	8mm	STMM8	8mm
TM10	5/16"	STM10	5/16"	TMM9	9mm	STMM9	9mm
TM11	11/32"	STM11	11/32"	TMM10	10mm	STMM10	10mm
TM12	3/8"	STM12	3/8"	TMM11	11mm	STMM11	11mm
TM14	7/16"	STM14	7/16"	TMM12	12mm	STMM12	12mm
TM16	1/2"	STM16	1/2"	TMM13	13mm	STMM13	13mm
TM18	9/16"	STM18	9/16"	TMM14	14mm	STMM14	14mm

also includes:

- T72 High Strength Sealed Ratchet
- TMU8B Universal Joint
- TMXK2 2" Knurled Extension
- TMXK60 6" Knurled Extension
- PB99A Storage Box



144TMPB

Metric, 6-Point



117TMM

117TMM Metric 6-Point Starter Set
17 Tools Include:

6-Point Shallow Sockets Metric:	
TMM4	4mm
TMM5	5mm
TMM5.5	5.5mm
TMM6	6mm
TMM7	7mm
TMM8	8mm
TMM9	9mm
TMM10	10mm
TMM11	11mm
TMM12	12mm
TMM13	13mm
TMM14	14mm
TMM15	15mm

also includes:

- T72 High Strength Sealed Ratchet
- TMU8B Universal Joint
- TMXK2 2" Knurled Extension
- TMXK4 4" Knurled Extension

Inches, 6-Point



134ATMP

134ATMP 6-Point Fractional General Service Set
34 Tools Include:

6-Point Shallow Sockets:		6-Point Deep Sockets:	
TM6	3/16"	STM6	3/16"
TM7	7/32"	STM7	7/32"
TM8	1/4"	STM8	1/4"
TM9	9/32"	STM9	9/32"
TM10	5/16"	STM10	5/16"
TM11	11/32"	STM11	11/32"
TM12	3/8"	STM12	3/8"
TM14	7/16"	STM14	7/16"
TM16	1/2"	STM16	1/2"
TM18	9/16"	STM18	9/16"

also includes:

- T72 High Strength Sealed Ratchet
- TMU8B Universal Joint
- TMXK2 2" Knurled Extension
- TMXK4 4" Knurled Extension
- TMXK60 6" Knurled Extension
- SGT4BR Long Shank Driver
- TM10G 6" Breaker Bar
- TM61A 6" Flexible Extension
- TM67A Ratchet Adaptor
- TM82 Flat Tip Driver .036 x 1/4"
- TM408 Double Square Socket 1/4"
- TM410 Double Square Socket 5/16"
- TM412 Double Square Socket 3/8"
- TMS70A Ratchet Spinner

General Service Sets **1/4" Drive** Inches, 6-Point



120DTMPB

120DTMPB 6-Point General Service

20 Tools Include:

6-Point Shallow Sockets:

TM6	3/16"
TM7	7/32"
TM8	1/4"
TM9	9/32"
TM10	5/16"
TM11	11/32"
TM12	3/8"
TM14	7/16"
TM16	1/2"
TM18	9/16"

also includes:

SGT4BR	Long Shank Driver
TM10G	6" Breaker Bar
TM408	Double Square Socket 1/4"
TM410	Double Square Socket 5/16"
TM412	Double Square Socket 3/8"
T72	High Strength Sealed Ratchet
TMU8B	Universal Joint
TMXK2	2" Knurled Extension
TMXK4	4" Knurled Extension
TMXK60	6" Knurled Extension
PB24A	Storage Box



114ATMP

114ATMP 6-Point Fractional Set

14 Tools Include:

6-Point Shallow Sockets:

TM6	3/16"	TM11	11/32"
TM7	7/32"	TM12	3/8"
TM8	1/4"	TM14	7/16"
TM9	9/32"	TM16	1/2"
TM10	5/16"	TM18	9/16"

also includes:

T72	High Strength Sealed Ratchet
TMU8B	Universal Joint
TMXK2	2" Knurled Extension
TMXK4	4" Knurled Extension
KRA229	Metal Box (optional)



113BTMP

113BTMP 6-Point Fractional Set

13 Tools Include:

6-Point Shallow Sockets:

TM6	3/16"	TM11	11/32"
TM7	7/32"	TM12	3/8"
TM8	1/4"	TM14	7/16"
TM9	9/32"	TM16	1/2"
TM10	5/16"	TM18	9/16"

also includes:

TMXK2	2" Knurled Extension
TMXK4	4" Knurled Extension
TF72	Long Flex Handle 6 1/8"

Ratchets

Round Head Ratchets



Round Head

Feature a slim design plus a strong 39 or 60 tooth gear action for use in confined areas.

Round Head Ratchets	Handle Type	Head Shape	Teeth	Angle	Drive Size	Head Length (A)	Head Width (B)	Head Depth (C)	Part Number
TK860	Short Handle	Round	60	6°	9/16"	15/16"	3 1/16"		RKRT860
T860	Standard Handle	Round	60	6°	9/16"	15/16"	4 1/2"		RKRT860
TH737	Long Flex Handle	Round	39	9°	3/8"	1 7/32"	6 7/8"		RKRTM739
TMR860	Fingertip	Round	60	6°	3/8"	1 1/2"	4 1/2"		RKRT860

ASME/ANSI B107-10M-1996

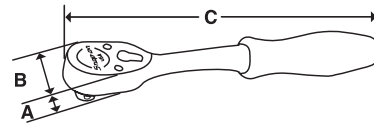
1/4" Drive Ratchets

Dual 80™ Technology Based Ratchets

Stop, Turn and Listen. Introducing the smoothest, strongest ratchets on the planet. You have to try them to believe them.

Based On Dual 80™ Technology These Ratchets Feature:

- Dual pawls and 72 gear teeth providing superior strength to bust loose those rusted and seized fasteners
- Fine tooth ratcheting action requires the least amount of ratcheting arc to engage the next tooth allowing you to ratchet in tighter areas
- Snap-on's ultimate strength and patented sealed mechanism provides permanent lubrication and seals out dirt, dust and other contaminants leading to a longer tool life



High Strength Ratchets



GT72



T72



TF72



THL72



THLF72



TL72



TX72

HY-LOK® Fastener Ratchet

HY-LOK® Fastener Ratchet

Feature a hole through the head and square drive so the fastener may be held steady with a hex wrench as the fastener's collar is tightened.



TFY936

Quick Release Ratchet



TR936

Icon	Icon	Icon	Icon	Icon	Icon	Icon	A	B	C	Icon
<i>High Strength Sealed Ratchets</i>										
T72	GT72	Standard Handle	Sealed		72	5°	7/16	29/32	4 7/16	RKRT72
THL72	—	Long Handle	Sealed	Comfort	72	5°	7/16	29/32	6 7/8	RKRT72
TL72	—	Long Handle	Sealed		72	5°	7/16	29/32	6 1/2	RKRT72
TF72*	—	Long Flex Head	Sealed		72	5°	7/16	29/32	4 1/2	RKRT72
THLF72*	—	Long Flex Head	Sealed	Comfort	72	5°	7/16	29/32	8 1/4	RKRT72
TX72**	—	Locking Flex Head	Sealed		72	5°	7/16	29/32	6 5/32	RKRT72
<i>Quick Release Ratchet</i>										
TR936	—	Quick Release Handle	Sealed		36	10°	7/16	7/8	4 7/16	RKRT936
<i>FOD Ratchet</i>										
T936FOD †	—	Standard Handle	HY-LOK®		36	10°	3/8	1 7/32	4 7/16	—
<i>HY-LOK® Fastener Ratchet</i>										
TFY936	—	Standard Handle	HY-LOK®		36	10°	3/8	1 7/32	6 7/8	—

ASME/ANSI B107-10M-1996

*Uses RKRT841JT Flex Joint Repair Kit

**Uses RKRT841JT Flex Joint Repair Kit and RKRT841LM Locking Mechanism Repair Kit.

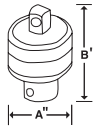
† This ratchet is designed to help prevent foreign object damage in sensitive work environments. The coverplate is permanently affixed to the ratchet head with rivets to reduce the chance of small part debris.

Accessories 1/4" Drive

Ratchet Adaptor

	TM77	20	18°	A 15/16	B 1 3/8
--	-------------	-----------	------------	-------------------	-------------------

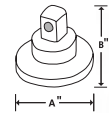
ASME/ANSI B107.10M-1996



TM77

Ratchet Spinner

	TMS70A	A 31/32	B 27/32
--	---------------	-------------------	-------------------



TMS70A

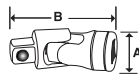


103UFTS

103UFTS Combination Drive Universal Joint Set. Includes 1/4" drive TMU8B, 3/8" drive FU8A, and 1/2" drive S8 Universal Joints (3 pcs) in storage tray.

Universal Joint

	TMU8B	A 1/2	B 1 5/16
--	--------------	-----------------	--------------------



TMU8B

TMU8B Universal Joint

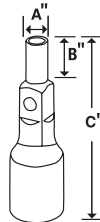
Universal joints help increase access to hard to reach fastener applications. Snap-on® universals are stronger and more reliable than competitive designs due to our professional manufacturing processes. The pins in the universal joint are laser welded in place meaning they won't "walk" out over time.



TMXM17

Magnetic Adaptors

	TMXM17	A 7/32	B 13/32	C 1 21/32
	TMXM114	A 7/32	B 9/32	C 1 17/32



Short Shank Driver Stubby Handle

	TM40ASA	C 2 1/8	E 1 3/4
--	----------------	-------------------	-------------------



TM40ASA

Long Shank Driver w/Female Square Drive

	SGT4BR*	A 5/16	B 2	C 7
	TM9CSA**	A 5/16	B 6 3/8	C 10



SGT4BR

* New Instinct™ Handle provides maximum turning power and greater comfort. Six specially designed curves and flutes provide fingertip control and aids in spinning. Nickel/chrome plating helps protect against corrosion and promotes easy clean up.
**Internal square drive in handle allows use with various handles.

Flexible Drivers

For low torque applications.

	TM62B	A 1/4	B 2 7/32	C 6 3/4
	TM63A	A 1/4	B 4 21/32	C 9 3/16



TM62B



TM615

Extra Long Shank Flexible Driver

	TM615	A 1/4	B 15	C 18 5/8
--	--------------	-----------------	----------------	--------------------

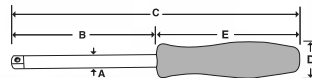
Square Drive Adaptors

	TA3	A 3/8	B 1/4	C 11/16	D 1 1/4
	GFAT1E	A 1/4	B 3/8	C 1/2	D 15/16

1206GS Combination Drive Adaptor Set. Includes 1/4" drive GFAT1E and TA3 Adaptors, 3/8" drive A2A and GSAF1E Adaptors and 1/2" drive GLA12B and GLAS1E Adaptors (6 pcs) in storage tray.

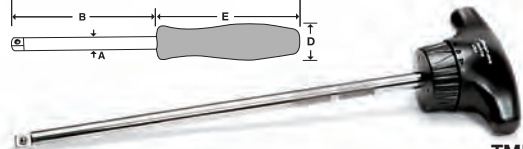


1206GS



Ratcheting T-Handle Driver

	TMRT8	26	13.8°	C 10	D 3	E 2
--	--------------	-----------	--------------	----------------	---------------	---------------



TMRT8



TMR4

Ratcheting Driver

	TMR4	B 3 7/8	C 8 31/32	E 5 3/32
--	-------------	-------------------	---------------------	--------------------

Use with any 1/4" drive socket to create a ratcheting nut driver. The three position ratchet mechanism works in forward, reverse, or lock out the ratcheting action completely.



WARNING

- Do not use chrome or industrial finish hand tools with impact drivers.
- Do not use on live electrical circuits.
- Frequently inspect, clean, and lubricate all non-sealed ratchet mechanisms with light oil.
- Do not replace worn parts individually; use entire contents of the service kit.
- Read additional safety precautions on pages 534 to 537.



1/4" Drive Accessories

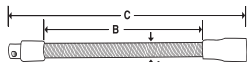


TM61A

Flexible Extension

	A	B	C
TM61A	5/16	5	6

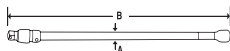
ASME/ANSI B107.10M-1996



TMXKL110

Locking Extensions

The quick release sleeve releases socket from extension quickly and easily. Knurling at the drive end provides for easy fingertip turning.



	A	B
TMXKL60	5/16	6
TMXKL110	5/16	11
TMXKL240	3/8	24

103TMXKL Locking Extension Set. TMXKL60 thru TMXKL240 (3 pcs) (6", 11", 24") in a storage tray.

TMXKLP. Locking pins for TMXKLP Series Extensions. Pack of 5.

TMXKLRK. Repair kit for TMXKLP Series Extensions.



TMXWK4



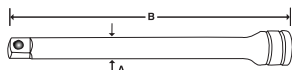
106ATMXW

Wobble Extensions

Wobble function provides 16° of additional accessibility. Knurled shanks for easy fingertip turning.



	A	B
TMXW1	5/16	1 1/4
TMXWK2	5/16	2
TMXWK4	5/16	4
TMXWK60	5/16	6
TMXWK80	5/16	8
TMXWK110	5/16	11



TMXW1 is not knurled.

106ATMXW Wobble Extension Set. TMXW1 through TMXWK110

(6 pcs) (1 1/4", 2", 4", 6", 8", 11") in storage tray.



TMXKV5



102TMXKV

Variable Length Extensions

Reach recessed fasteners quicker and easier in limited access applications. Applications include limited access areas under automotive dashboards and aircraft engines. Spring loaded extension maintains contact with fastener. A low clearance problem solver. Precision cold forged construction for robust performance. Chamfered drive ends for easy engagement. Knurled for easy hand turning. Nickel/chrome plating helps protect against corrosion and makes it easy to wipe clean.



	Finish	Extended Length, inches
TMXKV3	Chrome	3
TMXKV5	Chrome	5

102TMXKV Variable Length Extension Set. TMXKV3 and TMXKV5

(2 pcs) in storage tray.



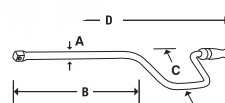
TMS4E



TMS4EK

Speeder

	A	B	C	D
TMS4E	5/16	7 1/8	3	16



Speeder w/Knob

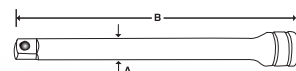
	A	B	C	D
TMS4EK	5/16	7 1/8	3	15 1/32



GTMXK80



GTMX4



TMXK60



106BTMX

Knurled Extensions

	A	B
TMX1*	5/16	1 1/4
TMXK2*	5/16	2
TMXK4	5/16	4
TMXK60*	5/16	6
TMXK80*	5/16	8
TMXK110	5/16	11
TMXK140	5/16	14
TMX240*	3/8	24
TMX360	3/8	36



TMX1

*Not knurled

*ASME/ANSI B107.10M-1996

106BTMX Knurled Extension Set. TMX1 thru TMXK110 (6 pcs) (1 1/4", 2", 4", 6", 8", 11") in storage tray.

Wobble Plus Extensions

Extensions are usable in both wobble and rigid functionality. Wobble function provides 16° of additional accessibility.



	A	B
TMXWP1	5/16	1 1/4
TMXWP2	5/16	2
TMXWP4	5/16	4
TMXWP6	5/16	6
TMXWP8	5/16	8
TMXWP11	5/16	11



TMXWP4

106ATMXWP Wobble Plus Extension Set. TMXWP1 thru

TMXWP11 (6 pcs) (1 1/4", 2", 4", 6", 8", 11") in storage tray.

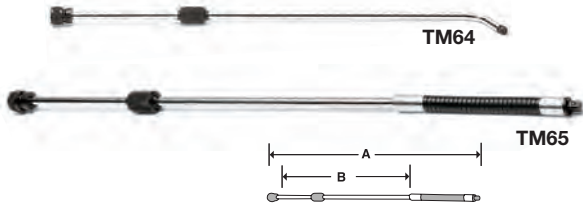


TZ1

TZ1 Extension Connector. 1/4" drive extension connector adds versatility to extensions, breaker bars, ratchets and crowfoot wrenches. Connect one or more tools together to make different shapes, lengths and angles to easily reach limited access fasteners. Use in automotive, aircraft, marine, heavy truck, plumbing and manufacturing applications. Specific applications include reaching behind semi truck dash boards, oil pan bolts, valve covers, transmission valve bodies plus various motorcycle and aircraft applications.

TZ2 Extension Connector Set. Set of two TZ1 Extension Connectors.

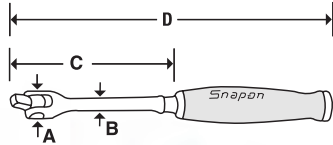
Accessories 1/4" Drive



Adjusting Wrenches

	A	B	Shaft Type
TM64	18 1/4	16	Rigid
TM65	19 3/4	14 1/4	Flexible

Ideal for carburetor idle adjustment. Also for older style window type distributors with ignition points. Knobs are marked for counting turns.



THBB10

Breaker Bar w/Comfort Handle

	A	B	C	D
THBB10	19/32	13/16	3 1/4	6 15/32

RKBB1 Repair Kit

Repair kit for THBB10 Breaker Bar.

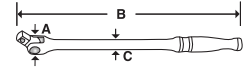


TM10G

Breaker Bar

	A	C	B
TM10G	5/16	19/32	6

ASME/ANSI B107.10M-1996

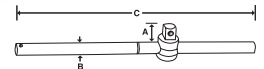


TM5

Sliding T-handle

	A	B	C
TM5	13/16	5/16	4 1/2

ASME/ANSI B107.10M-1996



Set Add-on and 1/8" Drive



107ATMPB

Set (Add-on)

107ATMPB Expandable General Service Set and Additions

Start with the 107ATMPB General Service Set and add any of the suggested socket sets below to custom build exactly the 1/4" drive set you need. The storage case has a large enough cavity to accommodate 2 rows of sockets—standard length, semi deep, deep, or universal socket sets, or any combination of these in U.S. or metric sizes.

7 Tools Include:

T72	High Strength Sealed Ratchet	TMXK60	6" Knurled Extension
TMU8B	Universal Joint 1/4" Drive	TM10G	Breaker Bar 6"
TMXK2	2" Knurled Extension	SGT4BR	Long Shank Driver 1/4"
TMXK4	4" Knurled Extension	PB24A	Storage Case

Suggested Additions:

110TMY	6-Point Shallow Socket Set (10 pcs)
110STMY	6-Point Deep Socket Set (10 pcs)
111TMDY	12-Point Metric Shallow Socket Set (11 pcs)
111STMDY	12-Point Metric Deep Socket Set (11 pcs)
106ETMAMY	Metric Hex Driver Set (6 pcs)



1605TA

Service Set (1/8" Drive)

1605TA General Service Set

5 Tools Include, 6-point Sockets:

T6	3/32"	T10	5/32"
T8	1/8"	T12	3/16"
T40A	1/8" Drive Handle		

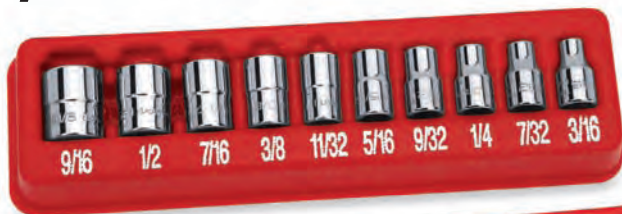


WARNING



- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.

1/4" Drive FLANK DRIVE® Sockets



110TMY



120STTM



110TMDY

Shallow

II	6	12	12	A	B	C	D	E
1/8	TM04	—	—	7/32	7/16	1/2	7/8	1/8
5/32	TM05*	—	—	9/32	15/32	1/2	7/8	5/32
3/16	TM6*	TMD6*	GTMD6	9/32	15/32	1/2	7/8	5/32
7/32	TM7*	TMD7*	GTMD7	11/32	15/32	1/2	7/8	3/16
1/4	TM8	TMD8	GTMD8	3/8	15/32	1/2	7/8	7/32
9/32	TM9	TMD9	GTMD9	13/32	15/32	1/2	7/8	1/4
5/16	TM10	TMD10	GTMD10	15/32	15/32	1/2	7/8	9/32
11/32	TM11	TMD11	GTMD11	1/2	15/32	5/16	7/8	9/32
3/8	TM12	TMD12	GTMD12	17/32	1/2	1/2	7/8	9/32
7/16	TM14	TMD14	GTMD14	19/32	9/16	1/2	7/8	3/8
1/2	TM16	TMD16	GTMD16	11/16	21/32	1/2	7/8	3/8
9/16	TM18	TMD18	GTMD18	25/32	23/32	1/2	29/32	3/8
5/8	TM20	—	—	27/32	25/32	19/32	31/32	13/32

ASME/ANSI B107.1-1993

*Conventional hex

Shallow Chrome Sets:

110TMY 6-Point Shallow Set. TM6 thru TM18 (10 pcs) (3/16" to 9/16").

110TMDY 12-Point Shallow Set. TMD6 thru TMD18 (10 pcs) (3/16" to 9/16").

Shallow/Deep Chrome Set:

120STTM 6-Point Shallow/Deep Set. TM6 thru TM18 Shallow Sockets and STM6 thru STM18 Deep Sockets (20 pcs) (3/16" to 9/16").



TM18

GTMD16



TMD16



112TMMY

Shallow

mm	6	12	A	B	C	D	E
4	TMM4*	—	6.7	12.1	13.3	22.2	4.6
4.5	TMM4.5*	—	7.2	12.1	13.3	22.2	4.3
5	TMM5*	TMMD5*	7.7	12.1	13.3	22.2	4.3
5.5	TMM5.5	TMMD5.5	8.3	12.1	13.3	22.2	4.6
6	TMM6	TMMD6	9.3	12.1	13.3	22.2	5.6
7	TMM7	TMMD7	10.5	12.1	13.3	22.2	6.1
8	TMM8	TMMD8	11.5	12.1	13.3	22.2	6.9
9	TMM9	TMMD9	12.7	12.1	13.3	22.2	7.4
10	TMM10	TMMD10	13.2	13.2	13.3	22.2	7.4
11	TMM11	TMMD11	15.2	14.6	13.3	22.2	9.4
12	TMM12	TMMD12	16.5	15.6	13.3	22.2	9.4
13	TMM13	TMMD13	17.6	16.7	13.3	22.2	9.4
14	TMM14	TMMD14	18.8	17.8	14.1	22.2	9.7
15	TMM15	—	20.4	19.4	14.1	23.0	9.1
16	TMM16	—	21.0	20.2	16.1	25.0	10.2

*Conventional hex

Metric Shallow Chrome Sets:

112TMMY Metric 6-Point Shallow Set. TMM5 thru TMM15 (12 pcs) (5 to 15mm).

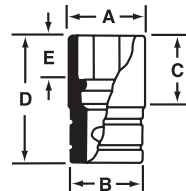
111TMDY Metric 12-Point Shallow Set. TMMD5 thru TMMD14 (11 pcs) (5 to 14mm).



TMM14




TMMD14



FLANK DRIVE® Sockets 1/4" Drive

Semi Deep

	6	12	A	B	C	D	E
3/16	TMS6*	TMDS6*	5/16	15/32	29/32	1 1/4	7/32
7/32	TMS7*	TMDS7*	11/32	15/32	29/32	1 1/4	7/32
1/4	TMS8	TMDS8	3/8	15/32	29/32	1 1/4	1/4
9/32	TMS9	TMDS9	13/32	15/32	23/32	1 1/4	1/4
5/16	TMS10	TMDS10	15/32	15/32	23/32	1 1/4	9/32
11/32	TMS11	TMDS11	1/2	15/32	23/32	1 1/4	5/16
3/8	TMS12	TMDS12	9/16	1/2	23/32	1 1/4	5/16
7/16	TMS14	TMDS14	5/8	19/32	23/32	1 1/4	3/8
1/2	TMS16	TMDS16	11/16	21/32	23/32	1 1/4	3/8
9/16	TMS18	TMDS18	3/4	23/32	23/32	1 1/4	3/8

*Conventional hex

Chrome Semi Deep Sets:

110TMSY 6-Point Semi Deep Set. TMS6 thru TMS18 (10 pcs) (3/16" to 9/16").

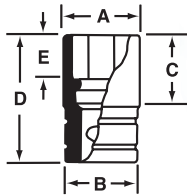
110TMSDY 12-Point Semi Deep Set. TMDS6 thru TMDS18 (10 pcs) (3/16" to 9/16").



TMS16



110TMSY



TMMS14



TMMDS14



110TMSDY



TMD14




112TMSY



112TMSDY

Semi Deep

	6	12	A	B	C	D	E
5	TMMS5*	TMMDS5*	7.7	12.1	22.9	31.8	5.1
5.5	TMMS5.5*	TMMDS5.5	8.3	12.1	22.9	31.8	5.3
6	TMMS6	TMMDS6	9.3	12.1	22.9	31.8	5.8
7	TMMS7	TMMDS7	10.5	12.1	22.9	31.8	6.1
8	TMMS8	TMMDS8	11.5	12.1	18.4	31.8	6.9
9	TMMS9	TMMDS9	12.7	12.1	18.4	31.8	7.4
10	TMMS10	TMMDS10	14.0	13.2	18.4	31.8	7.4
11	TMMS11	TMMDS11	15.4	14.6	18.4	31.8	9.4
12	TMMS12	TMMDS12	16.5	15.6	18.4	31.8	9.4
13	TMMS13	TMMDS13	17.6	16.7	18.4	31.8	9.4
14	TMMS14	TMMDS14	18.8	17.8	18.4	31.8	9.7
15	TMMS15	TMMDS15	20.4	19.4	18.4	31.8	9.7

*Conventional hex

Metric Chrome Semi Deep Sets:

112TMSY Metric 6-Point Semi Deep Set. TMMS5 thru TMMS15 (12 pcs) (5 to 15mm).

112TMSDY Metric 12-Point Semi Deep Set. TMMDS5 thru TMMDS15 (12 pcs) (5 to 15mm).



110STMY



STMD16




STM18



GSTMD14

Deep

	6	12	12	A	B	C	D	E
1/8	STM04*	—	—	7/32	7/16	1 21/32	2	1/8
5/32	STM05*	—	—	7/32	15/32	1 21/32	2	3/16
3/16	STM6*	STMD6*	GSTMD6*	7/16	15/32	1 21/32	2	3/16
7/32	STM7*	STMD7*	GSTMD7*	7/16	15/32	1 21/32	2	7/32
1/4	STM8	STMD8	GSTMD8	7/16	15/32	1 21/32	2	7/32
9/32	STM9	STMD9	GSTMD9**	7/16	15/32	1 21/32	2	1/4
5/16	STM10	STMD10	GSTMD10**	7/16	15/32	1 21/32	2	7/32
11/32	STM11	STMD11	GSTMD11	1/2	15/32	1 21/32	2	9/32
3/8	STM12	STMD12	GSTMD12	9/16	9/16	1 21/32	2	9/32
7/16	STM14	STMD14	GSTMD14	9/16	9/16	1 21/32	2	3/8
1/2	STM16	STMD16	GSTMD16	11/16	21/32	1 21/32	2	3/8
9/16	STM18	STMD18	GSTMD18	3/4	23/32	1 21/32	2	3/8

*Conventional hex

**Features a larger bolt clearance diameter for servicing aerospace fasteners.

Deep Chrome Sets:

110STMY 6-Point Deep Set. STM6 thru STM18 (10 pcs) (3/16" to 9/16").

110STMDY 12-Point Deep Set. STMD6 thru STMD18 (10 pcs) (3/16" to 9/16").



WARNING

- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.



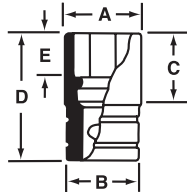
1/4" Drive FLANK DRIVE® Sockets



112STMMY



STMMD14



124STMM

Deep

mm	6	12	A	B	C	D	E
4	STMM4*	—	6.7	12.1	42.2	50.8	4.6
4.5	STMM4.5*	—	7.2	12.1	42.2	50.8	4.6
5	STMM5*	STMMD5*	7.7	12.1	42.2	50.8	5.1
5.5	STMM5.5	STMMD5.5	8.3	12.1	42.2	50.8	5.3
6	STMM6	STMMD6	9.3	12.1	42.2	50.8	5.8
7	STMM7	STMMD7	10.5	12.1	42.2	50.8	6.1
8	STMM8	STMMD8	11.5	12.1	42.2	50.8	6.9
9	STMM9	STMMD9	12.7	12.1	38.1	50.8	7.4
10	STMM10	STMMD10	14.0	13.2	38.1	50.8	7.4
11	STMM11	STMMD11	15.2	14.6	38.1	50.8	9.4
12	STMM12	STMMD12	16.5	15.6	38.1	50.8	9.4
13	STMM13	STMMD13	17.6	16.7	38.1	50.8	9.4
14	STMM14	STMMD14	18.8	17.8	38.1	50.8	9.7
15	STMM15	—	20.4	19.4	38.1	50.8	9.1

*Conventional hex

Metric Deep Chrome Sets:

112STMMY Metric 6-Point Deep Set. STMM5 thru STMM15 (12 pcs)
(5 to 15mm).

111STMMDY Metric 12-Point Deep Set. STMMD5 thru STMMD14 (11 pcs)
(5 to 14mm).

Metric Shallow/Deep Chrome Set:

124STMM Metric 6-Point Shallow/Deep Set.

TMM4 thru TMM14 Shallow Sockets (except TMM4.5) plus STMM4 thru STMM14 Deep Sockets (except STMM4.5) (24 pcs) (4, 5 to 14mm).

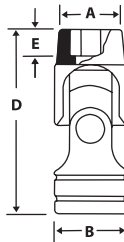
FLANK DRIVE® Universal Sockets



Shallow Universal
Inches, 12 pt.



Shallow Universal
Inches, 6 pt.



106TMUA

Shallow Universal

11	6	12	12	A	B	D	E
3/16	—	TMU61A*	GTMU71A	19/64	1/2	1 17/64	1/4
7/32	—	TMU71A*		11/32	1/2	1 17/64	1/4
1/4	TMUS81A	TMU81B		3/8	1/2	1 17/64	1/4
9/32	—	TMU91A		27/64	1/2	1 5/16	9/32
5/16	TMUS101A	TMU101A	15/32	1/2	1 11/32	9/32	
11/32	—	TMU111A	GTMU141A	1/2	1/2	1 3/8	9/32
3/8	TMUS121A	TMU121A		17/32	1/2	1 27/64	9/32
7/16	TMUS141A	TMU141A		19/32	1/2	1 29/64	13/32
1/2	TMUS161A	TMU161A		11/16	1/2	1 33/64	13/32
9/16	TMUS181A	TMU181A		3/4	1/2	1 35/64	13/32



106TMUSA

*Conventional hex

Shallow Chrome Universal Sets:

106TMUSA 6-Point Shallow Set. TMUS81A thru TMUS181A (except TMUS111A) (6 pcs)
(1/4" to 9/16").

106TMUA 12-Point Shallow Set. TMU81B thru TMU181A (except TMU91A and TMU111A) (6 pcs)
(1/4" to 9/16").

FLANK DRIVE® Universal Sockets 1/4" Drive



111TMUSMA

Shallow Universal

mm	6	12	A	B	D	E
5	TMUSM5A	TMUM5A	8.1	12.7	29.2	3.3
5.5	TMUSM5.5A	—	8.5	12.7	29.2	3.6
6	TMUSM6A	TMUM6A	9.6	12.7	29.7	3.8
7	TMUSM7A	TMUM7A	10.7	12.7	30.5	4.3
8	TMUSM8A	TMUM8A	11.8	12.7	30.5	4.8
9	TMUSM9A	TMUM9A	12.7	12.7	31.2	4.8
10	TMUSM10A	TMUM10A	14.0	12.7	32.5	5.8
11	TMUSM11A	—	15.4	12.7	33.0	6.6
12	TMUSM12A	TMUM12A	16.5	12.7	34.5	6.9
13	TMUSM13A	TMUM13A	17.3	12.7	36.8	7.6
14	TMUSM14A	—	18.8	12.7	38.6	8.6
15	TMUSM15A	—	20.4	12.7	41.1	8.9

Metric Shallow Chrome Universal Set:

111TMUSMA Metric 6-Point Shallow Set. TMUSM5.5A thru TMUSM15A (11 pcs) (5.5 to 15mm).

106TMUSMA Metric 6-Point Shallow Set. TMUSM8A, TMUSM10A, TMUSM12A thru TMUSM15A (6 pcs) (8, 10, 12 to 15mm).



Shallow Universal Metric 6 pt. Shallow Universal Metric 12 pt.

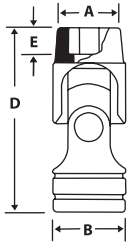
Deep Universal Inches 12 pt. Deep Universal Metric 12 pt.

Deep Universal

mm	12	A	B	D	E
5/16	GSTMU101A	15/32	15/32	1 11/16	9/32

Deep Universal

mm	12	A	B	D	E
10	STMUM10A	14.0	12.7	41.4	5.8



Special Purpose Sockets

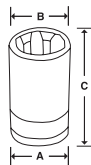


STLE50

Deep TORX®

Deep design allows access to hard to reach bolts found on GM, Ford and Chrysler steering columns with air bags. Needed to service GM ABITS distributor on 1992 thru 1995 GM, LT1 350 V8 engines.

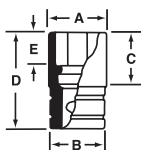
#	A	B	C
E4	15/32	9/32	2
E5	15/32	5/16	2



TM412

Double Square

mm	A	B	C	D	E
1/4	15/32	15/32	17/32	7/8	1/4
5/16	9/16	17/32	17/32	7/8	9/32
3/8	21/32	5/8	17/32	7/8	5/16



ASME/ANSI B107.1-1993



TSE120

Universal TORX®

#	A	B	C
E8	13/32	1/2	1 3/8
E10	1/2	1/2	1 3/8
E12	1/2	1/2	1 3/8



213AFLEY



Shallow TORX®

210AFLEY

#	A	B	C
E4	7/16	7/8	17/64
E5	7/16	7/8	19/64
E6	7/16	7/8	21/64
E7	7/16	7/8	23/64
E8	7/16	7/8	27/64
E100	1/2	7/8	7/16



TLE60A

213AFLEY Combination Drive Shallow TORX® Set. Includes 1/4" drive TLE40A thru TLE100A, 3/8" drive FLE110A thru FLE140A and 1/2" drive SLE160 thru SLE240 (13 pcs) (E4 to E24).

210AFLEY Combination Drive Shallow TORX® Set. 1/4" drive TLE40A thru TLE80A plus 3/8" drive FLE100A thru FLE180A (10 pcs) (E4 thru E18).

WARNING

- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.



1/4" Drive Socket Drivers



Hex TMA6E GTMA8E

	Hex		A	B	A	B
1/16	TMA2E	—	1 7/8	TMA2E2	6	TMAL2E2
5/64	TMA2.5E	GTMA2.5E	1 7/8	TMA2.5E2	6	TMAL2.5E2
3/32	TMA3E	GTMA3E	1 7/8	TMA3E2	6	TMAL3E2
7/64	TMA3.5E	—	1 7/8	TMA3.5E2	6	TMAL3.5E2
1/8	TMA4E	GTMA4E	1 7/8	TMA4E2	6	TMAL4E2
9/64	TMA4.5E	—	1 7/8	TMA4.5E2	6	TMAL4.5E2
5/32	TMA5E	GTMA5E	1 7/8	FA5E2	—	—
3/16	TMA6E	GTMA6E	1 19/16	FA6E2	—	—
7/32	TMA7E	GTMA7E	1 7/8	FA7E2	—	—
1/4	TMA8E	GTMA8E	1 7/8	FA8E2	—	—

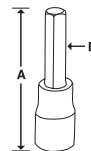
110ETMAY Standard Hex Set. TMA2E thru TMA8E (10 pcs) (1/16" to 1/4").

212EFTAY Combination Drive Standard Hex Set.

Includes 1/4" drive TMA2E thru TMA3.5E Hex Drivers plus 3/8" drive FA4E thru FA12E Hex Drivers (12 pcs) (1/16" to 3/8").



TMAM6E



Hex

	Hex		A	B
2	TMAM2E	—	47.8	TMAM2E2A
2.5	TMAM2.5E	—	47.8	TMAM2.5E2
3	TMAM3E	—	47.8	TMAM3E2
4	TMAM4E	—	47.8	FAM4E2
5	TMAM5E	—	47.8	FAM5E2
6	TMAM6E	—	47.8	FAM6E2

106ETMAMY Metric Standard Hex Set. TMAM2E thru TMAM6E (6 pcs) (2 to 6mm).

210EFTAMY Combination Metric Standard Hex Set.

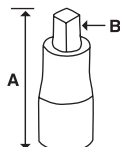
Includes 1/4" drive TMAM2E thru TMAM3E Standard Length Drivers plus 3/8" drive FAM4E thru FAM10E Standard Length Drivers (10 pcs) (2 to 10mm).



208EFTAXSY



TMAXS5E



208EFTAMXS Y

Stubby Hex

	Stubby Hex		A	B
1/8	TMAXS4E	—	1 1/32	TMAXS4E2
9/64	TMAXS4.5E	—	1 1/16	TMAXS4.5E2
5/32	TMAXS5E	—	1 1/16	TMAXS5E2
3/16	TMAXS6E	—	1 3/32	TMAXS6E2

208EFTAXSY Combination Drive Stubby Hex Set.

Includes 1/4" drive TMAXS4E thru TMAXS6E Stubby Drivers plus 3/8" drive FAXS7E thru FAXS12E Stubby Drivers (8 pcs) (1/8" to 3/8").

Stubby Hex

	Stubby Hex		A	B
3	TMAMXS3E	—	26.0	TMAMXS3E2
4	TMAMXS4E	—	27.0	TMAMXS4E2
5	TMAMXS5E	—	27.0	TMAMXS5E2
6	TMAMXS6E	—	29.0	TMAMXS6E2

208EFTAMXS Y Metric Combination Stubby Hex Set.

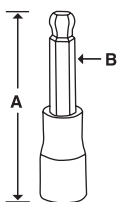
Includes 1/4" drive TMAMXS3E thru TMAMXS6E Stubby Drivers plus 3/8" drive FAMXS7E thru FAMXS10E Stubby Drivers (8 pcs) (3 to 10mm).



TMAMXS6E



TMAB6E



Ball Hex

	Ball Hex		A	B
1/8	TMAB4E	—	1 7/8	TMAB4E2
9/64	TMAB4.5E	—	1 7/8	TMAB4.5E2
5/32	TMAB5E	—	1 7/8	TMAB5E2
3/16	TMAB6E	—	1 15/16	TMAB6E2

208EFTABY Metric Ball Hex Combination Set.

Includes 1/4" drive TMAB4E thru TMAB6E Ball Hex Drivers plus 3/8" drive FAB7E thru FAB12E Ball Hex Drivers (8 pcs) (1/8" to 3/8").

Ball Hex

	Ball Hex		A	B
3	TMABM3E	—	47.7	TMABM3E2
4	TMABM4E	—	47.6	TMABM4E2
5	TMABM5E	—	47.9	TMABM5E2
6	TMABM6E	—	47.9	TMABM6E2

208EFTABMY Combination Drive Metric Ball Hex Set.

Includes 1/4" drive TMABM3E thru TMABM6E Standard Length Drivers plus 3/8" drive FABM7E thru FABM10E Standard Length Drivers (8 pcs) (3 to 10mm).



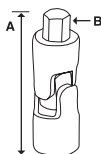
TMABM6E

Universal Stubby Hex

	Universal Stubby Hex		A	B
5	TUAM5E	—	38.1	TUAM5E3
6	TUAM6E	—	38.1	TUAM6E3



TUAM6E

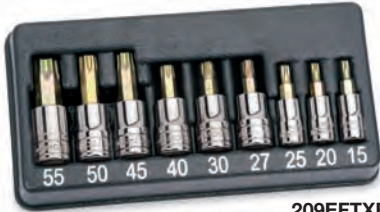


Socket Drivers 1/4" Drive

TORX®

#		A	B
T8	TTX8E	1 9/16	TTX8E2
T10	TTX10E	1 9/16	TTX10E2
T15	TTX15E	1 9/16	TTX15E2
T20	TTX20E	1 9/16	TTX20E2
T25	TTX25E	1 9/16	TTX25E2
T27	TTX27E	1 9/16	FTX27E2
T30	TTX30E	1 9/16	FTX30E2
T40	TTX40E	1 9/16	FTX40E2

212EFTXY Combination TORX® Set. Includes 1/4" drive TTX8E thru TTX25E TORX® Drivers plus 3/8" drive FTX27E thru FTX55E TORX® Drivers and FTX47E GM-style Driver (12 pcs) (T8 to T55 plus GM-style T47).



209EFTXBY

Heavy Duty Removal TORX®

#		A	B
T15	TTXB15E	1 9/16	TTXB15E2
T20	TTXB20E	1 9/16	TTXB20E2
T25	TTXB25E	1 9/16	TTXB25E2

209EFTXBY Heavy Duty Removal TORX® Set. Includes 1/4" drive TTXB15E thru TTXB25E TORX® Drivers plus 3/8" drive FTXB27E thru FTXB55E TORX® Drivers (9 pcs) (T15 to T55).

TORX® PLUS / Tamper Resistant

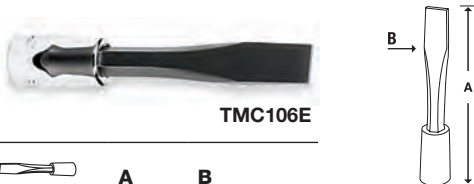
5 Lobe design. Two piece pinless design holds bit securely in socket while facilitating quick bit replacement. Cold formed socket delivers a strong, durable tool. Chrome plating resists corrosion and clean easily. For sale to authorized technicians only.

#		A	B
8IPR	TTXR8TPE	1 9/16 (40)	TTXR8TPE2
10IPR	TTXR10TPE	1 9/16 (40)	TTXR10TPE2
15IPR	TTXR15TPE	1 9/16 (40)	TTXR15TPE2
20IPR	TTXR20TPE	1 9/16 (40)	TTXR20TPE2
25IPR	TTXR25TPE	1 9/16 (40)	TTXR25TPE2

211EFTXRTPY Tamper Resistant Combination TORX® PLUS Set. Includes 1/4" drive TTXR8TPE thru TTXR25TPE TORX® PLUS Drivers plus 3/8" drive FTXR27TPE thru FTXR55TPE TORX® PLUS Drivers (11 pcs) (81PR to 55IPR). Applications for set include 2003 Ford Mustang transmissions, 2004 Ford F150 transfer case, 2004 Porsche Cayenne turbo air sensor, Delphi and Stanadyne pumps, Cummins B and C engine injection pumps and John Deere diesel injector pumps.

Flat Tip

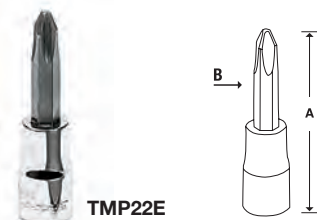
#		A	B
3/16 x .032	TMC104E	2 7/8	TMC104E2
1/4" x .032	TMC105E	2 15/16	TMC105E2
3/8 x .042	TMC106E	2 7/8	TMC106E2



TMC106E

PHILLIPS®

#		A	B
#1	TMP12E	1 7/8	TMP12E2
#2	TMP22E	1 7/8	FP22E2



TMP22E



TTX25E

GTTX15E



Long TORX®

TTXL25E

#		A	B
T8	TTXL8E	4 1/16	TTXL8E2
T10	TTXL10E	4 1/16	TTXL10E2
T15	TTXL15E	4 1/16	TTXL15E2
T20	TTXL20E	4 1/16	TTXL20E2
T25	TTXL25E	4 1/16	TTXL25E2



210EFTXRY

Tamper Resistant TORX®

#		A	B
T8	TTXR8E	1 9/16	TTXR8E2
T10	TTXR10E	1 9/16	TTXR10E2
T15	TTXR15E	1 9/16	TTXR15E2
T20	TTXR20E	1 9/16	TTXR20E2
T25	TTXR25E	1 9/16	TTXR25E2

210EFTXRY Tamper Resistant Combination TORX® Set. Includes 1/4" drive TTXR8E thru TTXR25E TORX® Drivers plus 3/8" drive FTXR27E thru FTXR50E TORX® Drivers (10 pcs) (T8 to T50).



TTXB25E

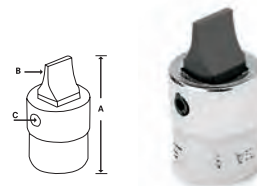


TTXR25E

TORX® PLUS

#		A	B
8IP	TTX8TPE	1 9/16	TTX8TPE2
10IP	TTX10TPE	1 9/16	TTX10TPE2
15IP	TTX15TPE	1 9/16	TTX15TPE2
20IP	TTX20TPE	1 9/16	TTX20TPE2
25IP	TTX25TPE	1 9/16	TTX25TPE2

211EFTXTPY Combination Drive TORX® Plus Set. Includes 1/4" drive TTX8TPE thru TTX25TPE Drivers plus 3/8" drive FTX27TPE thru FTX55TPE Drivers (11 pcs) (8IP to 55IP). TORX® PLUS fasteners may be found in almost all vehicles from the 1999 model year to present. Common applications include GM transmission bell housing bolts and Ford seat belt anchors. Use of a standard TORX® Driver on TORX® PLUS fasteners may result in a rounded out fastener head or damaged driver.



TM82

Short Flat Tip

#		A	B	C
1/4 x .036	TM82	7/8	TM82-2C	ESD303

Long PHILLIPS®

#		A	B
#2	TMP23E	3 1/16	TMP23E2



TMP23E

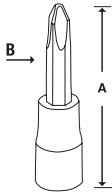


WARNING

- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.



1/4" Drive Socket Drivers

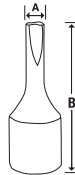


Short PHILLIPS®

#		A	B
#2	TMP21E	1 1/4	TMP21E2
#2	TMP82E	15/16	TMP82E2



TMP21E



Clutch

	A	B
TM27E	3/16	1 3/8
TM30E	1/4	1 3/8
TM31E	5/32	1 3/8

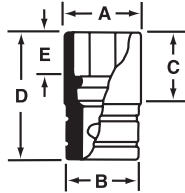


TM30E

FLANK DRIVE® Magnetic Power Sockets



MGM8D



MGMM10

Shallow Magnetic

Hex Size	Socket	A	B	D	E
1/4	MGM8D	7/16	1/2	7/8	3/32
5/16	MGM10C	1/2	1/2	15/16	3/32
3/8	MGM12C	9/16	19/32	15/16	1/8
7/16	MGM14C	11/16	11/16	15/16	1/8

Shallow Magnetic

mm	Socket	A	B	D	E
5.5	MGMM5.5	9.9	12.4	22.2	1.9
7	MGMM7	11.9	14.0	22.2	2.0
8	MGMM8	12.7	14.0	22.2	2.4
10	MGMM10	14.8	14.8	23.8	3.1

New spring loaded design improves holding power and allows greater bolt clearance. Coercive force of spring loaded deep magnetic power sockets is 15 times higher than that of sockets with conventional design.

Deep Magnetic, Spring Loaded

Hex Size	Socket	A	B	D	E
1/4	MGMS8A	3/8	7/16	2	3/32
5/16	MGMS10A	3/8	15/32	2	5/16



MGMS10A

Deep Magnetic, Spring Loaded

mm	Socket	A	B	D	E
7	MGMM5.5A	10.7	12.4	50.8	5.8
8	MGMM8A	11.8	12.4	50.8	5.8
10	MGMM10A	14.1	14.1	50.8	6.4
11	MGMM11B	15.6	15.6	50.8	6.4
12	MGMM12B	16.8	16.8	50.8	7.1
13	MGMM13A	18.1	18.1	50.8	7.6



MGMM11B

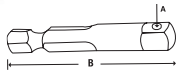
Power Drivers and Accessories



GMB3042

Hex Shanks

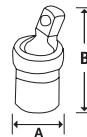
1/4" hex size; 1" length of hex.



Socket	A	B
GMB3042	Friction Ball	2
GM3042A	Lock Button	2
GM3043	Lock Button	4
GM3046	Lock Button	6



IPM80A

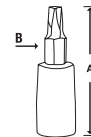


Swivel Ball Universal Joint

Lock button locking mechanism.



Socket	A	B
IPM80A	5/8	1 3/8

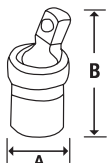


PTTX20E

TORX® Power Drivers

#	Socket	A	B
T20	PTTX20E	1 9/16	TTX20E2
T25	PTTX25E	1 9/16	TTX25E2

Impact Accessories



Swivel Ball Universal Joint

Socket	A	B
IPM800A	5/8	1 3/8



IPM800A

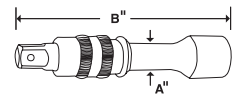


TMIXL62

Locking Extensions

Quick release locking sleeve provides a secure connection plus easy socket removal. Knurled release collar for easy one hand operation, even with slippery hands. Female drive end recessed to accommodate new style impact guns. Positive pin lock retains socket securely. Heavy duty shank for high torque applications. Industrial black finish helps protect against corrosion.

Hex Size	Socket	A	B
1/4	TMIXL32	11/32	2 7/8
1/4	TMIXL62	11/32	5 7/8
1/4	TMIXL122	11/32	11 7/8
1/4	TMIXL182	11/32	17 3/4
1/4	TMIXL242	11/32	23 3/4



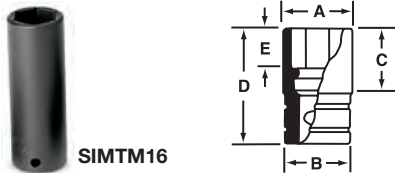
FLANK DRIVE® Impact Sockets 1/4" Drive



Shallow

mm	6	A	B	C	D	E
1/4	IMTM8A	13/32	1/2	17/32	7/8	1/4
5/16	IMTM10A	1/2	1/2	17/32	7/8	1/4
3/8	IMTM12A	9/16	1/2	17/32	7/8	1/4
7/16	IMTM14A	21/32	1/2	17/32	7/8	1/4
1/2	IMTM16A	23/32	1/2	17/32	7/8	9/32
9/16	IMTM18A	13/16	1/2	9/16	29/32	11/32

ASME/ANSI B107.2-1995



Deep

mm	6	A	B	C	D	E
1/4	SIMTM8	13/32	15/32	1 1/2	2	1/4
5/16	SIMTM10	1/2	1/2	1 1/2	2	1/4
3/8	SIMTM12	9/16	9/16	1 1/2	2	1/4
7/16	SIMTM14	21/32	21/32	1 1/2	2	1/4
1/2	SIMTM16	11/16	11/16	1 1/2	2	9/32
9/16	SIMTM18	13/16	13/16	1 1/2	2	11/32

Shallow

mm	6	A	B	C	D	E
5	IMTMM5	8.5	12.1	13.1	22.2	4.1
5.5	IMTMM5.5	9.3	12.1	13.1	22.2	4.1
6	IMTMM6	10.2	12.1	13.1	22.2	6.1
7	IMTMM7	11.5	12.1	13.1	22.2	6.1
8	IMTMM8	12.7	12.7	13.1	22.2	6.1
9	IMTMM9	14.0	14.0	13.1	22.2	6.1
10	IMTMM10	15.2	15.2	13.0	22.2	6.1
11	IMTMM11	16.4	16.4	12.8	22.2	6.4
12	IMTMM12	17.3	17.3	12.7	22.2	7.1
13	IMTMM13	18.7	18.7	12.5	22.2	7.4
14	IMTMM14	20.3	20.3	13.1	23.0	8.6
15	IMTMM15	21.1	21.1	13.9	23.8	8.9

RELATED ITEMS

Impact Wrenches (Air), pg 251
Ratchets (Air), pg 254



Deep

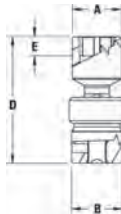
mm	6	A	B	C	D	E
5	SIMTMM5	8.5	12.1	41.9	50.8	4.1
5.5	SIMTMM5.5	9.3	12.1	41.9	50.8	4.1
6	SIMTMM6	10.2	12.1	41.9	50.8	6.1
7	SIMTMM7	11.5	12.1	41.9	50.8	6.1
8	SIMTMM8	12.7	12.7	41.9	50.8	6.1
9	SIMTMM9	14.0	14.0	41.9	50.8	6.1
10	SIMTMM10	15.2	15.2	41.9	50.8	6.1
11	SIMTMM11	16.4	16.4	41.9	50.8	6.4
12	SIMTMM12	17.3	17.3	41.9	50.8	7.1
13	SIMTMM13	18.7	18.7	41.9	50.8	7.4
14	SIMTMM14	20.3	20.3	41.9	50.8	8.6
15	SIMTMM15	21.1	21.1	41.9	50.8	8.9

FLANK DRIVE® Impact Swivel Sockets

Shallow Swivel

mm	6	A	B	D	E
7	IPTM7	11.5	15.4	37.4	4.3
8	IPTM8	12.7	15.4	38.6	4.8
10	IPTM10	15.2	15.4	41.0	5.8
12	IPTM12	17.3	17.9	44.9	6.9
13	IPTM13	18.7	17.9	46.1	7.4
14	IPTM14	20.3	17.9	47.7	7.9
15	IPTM15	21.1	17.9	48.1	7.9

106IPTMMY Metric 6-Point Shallow Swivel Set.
IPTMM8 thru IPTMM15 (6 pcs) (8 to 15mm).



IPTMM7



106IPTMMY

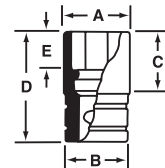
Impact Sockets/Special Purpose

Shallow TORX®

mm	6	A	B	C	D	E
E4	IMTLE40A	9/32	1/2	17/32	7/8	5/32
E5	IMTLE50A	9/16	1/2	17/32	7/8	3/16
E6	IMTLE60A	11/32	1/2	17/32	7/8	3/16
E7	IMTLE70A	3/8	1/2	17/32	7/8	1/4
E8	IMTLE80A	7/16	1/2	17/32	7/8	1/4



IMTLE40A



General Service Sets



BLPGSS1462 General Service Set.

Set Components (all 1/4" drive):

- 11 Fractional (3/16" to 5/8") and 11 Metric (4 to 14mm) Standard Sockets
- 11 Fractional (3/16" to 5/8") and 11 Metric (4 to 14mm) Deep Sockets
- 1 Bit Holder
- 4 Hex Bits (9/64", 3/16", 7/32", 1/4")
- 3 Flat Tip Bits (5/32", 3/16", 1/4")
- 2 Phillips® Bits (#1, #2)
- 7 Ratchet/Socket Accessories
- 1 Ratchet



BLPGSS1462



1/4" Drive General Service Sets



BLPGSS1451 General Service Set

- Set Components (all 1/4" drive):
- 10 Fractional (3/16" to 9/16") and 13 Metric (4 to 14mm) Standard Sockets
 - 3 Fractional (1/4", 5/16", 3/8") 8 pt. Sockets
 - 6 Torx® Socket Drivers (T8 to T27)
 - 6 Fractional Hex Socket Drivers (1/8" to 5/16")
 - 3 Flat Tip Socket Drivers (5/32", 7/32", 9/32")
 - 3 Phillips® Socket Drivers (#0, #1, #2)
 - 6 Ratchet/Socket Accessories
 - 1 Ratchet



BLPGSS1451



BLPGSSC100



BLPGSSC155

BLPGSSC100 General Service Set

- Set Components (1/4" Drive)
- 10 Fractional (3/16" to 9/16") and 13 Metric (4 to 14mm) Standard Sockets
 - 5 Ratchet/Socket Accessories
 - 1 Ratchet
- Set Components (3/8" Drive)
- 13 Fractional (1/4" to 1") and 19 Metric (6 to 24mm) Standard Sockets
 - 11 External Torx Sockets (E4 to E20)
 - 2 Spark Plug Sockets (5/8", 13/16")
 - 5 Ratchet/Socket Accessories
 - 1 Ratchet
 - 1 Spinner Handle
- Set Components (Combination Wrenches)
- 9 Fractional Combination Wrenches (1/4" to 3/4")
 - 10 Metric Combination Wrenches (10 to 19mm)

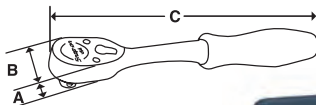
BLPGSSC155 General Service Set

- Set Components (1/4" Drive)
- 10 Fractional (3/16" to 9/16") and 13 Metric (4 to 14mm) Standard Sockets
 - 10 Fractional (3/16" to 9/16") and 11 Metric (4 to 14mm) Deep Sockets
 - 20 Assorted 1/4" hex bits with Bit Holder
 - 5 Ratchet/Socket Accessories
 - 1 Quick Release Ratchet
- Set Components (3/8" Drive)
- 13 Fractional (1/4" to 1") and 19 Metric (6 to 24mm) Standard Sockets
 - 11 Fractional (3/8" to 1") and 15 Metric (10 to 24mm) Deep Sockets
 - 11 External Torx® Sockets (E4 to E20)
 - 2 Spark Plug Sockets (5/8", 13/16")
 - 3 Metric Hex Socket Drivers (7, 8, 10mm)
 - 4 Tamper Resistant Torx® Socket Drivers (T40, T45, T50, T55)
 - 5 Ratchet/Socket Accessories
 - 1 Quick Release Ratchet
 - 1 Spinner Handle

Ratchets, Handles and Accessories



BPRTR936



Ratchets

				A	B	C	
BPRTR936	Quick Release	Standard	36	10°	15/32	31/32	5 5/8

Features quick release button for rapid socket/accessory changes, even with greasy or oily hands. Contoured handle for comfort and control. Chrome finish for easy clean up. All ratchets in series meet or exceed ANSI B107-10M-1996 specifications.

BPR703 Quick Release Ratchet Set. 1/4" drive BPRTR936, 3/8" drive BPRFR938 and 1/2" drive BPRSR940 Ratchets (3 pcs.) in a storage tray.



BPR703



103TMXLBP



TMXLBP6



BLPBB146



BLPCGHD146



Locking Extensions

	Length, inches
TMXLBP4	4
TMXLBP6	6
TMXLBP10	10

103TMXLBP Locking Extension Set. TMXLBP4, TMXLBP6 and TMXLBP10 (3 pcs) (4", 6" and 10") in a storage tray.



Handled Drivers

Stock No.	Description	Length, inches
BLPBB146	Breaker Bar	6
BLPCGHD146	Spinner Handle	6

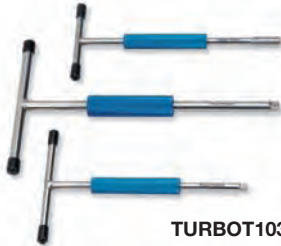
Ratchets, Handles and Accessories **1/4" Drive**



BLPEXTF146

Flexible Extensions

Stock No.	Length, inches
BLPEXTF146	6



TURBOT103



Turbo T-Handle Speed Drivers

Stock No.	Description	Handle Type
T9TURBO	1/4" square drive	Turbo T-Handle
TH10TURBO	1/4" hex	Turbo T-Handle

TURBOT103 Turbo T-Handle Set. T9TURBO (1/4" drive), TH10TURBO (1/4" hex) and F11TURBO (3/8" drive) (3 pcs.) in storage tray.



BLPEXTL1412



BLPLLEXT103



Extra Long Locking Extensions

Stock No.	Length, inches
BLPEXTL1412	12
BLPEXTL1418	18
BLPEXTL1424	24

BLPLLEXT103 Extra Long Locking Extension Set. Includes BLPEXTL1412, BLPEXTL1418, and BLPEXTL1424 (12", 18", 24") (3 pcs) in storage tray.



Spinning Adaptors

FSD14 Spinner Adaptor. 3/8" male to 1/4" female.

FSD38 Spinner Adaptor. 1/4" male to 3/8" female.

FSD3KT

FSD3KT Spinner Adaptor Set. Includes FSD14, FSD38 and FSD1.



Locking Extensions (Set Screw)

Stock No.	Finish	A	B
YA515A	Chrome	1/2	1 11/16



YA515A

YA515A Set Screw Locking Extension. Allows easy and secure stacking of tools. Securely connects breaker bar, extensions and ratchets to socket and socket drivers to eliminate socket coming loose when working overhead. Simply slide back sleeve to remove socket. Do not use with power or impact tools.



Ratchet Spinner

Stock No.	Length, inches
BLPSD14	25/32



BLPSD14



Universal Joint

Stock No.	Length, inches
BLPUJ14	1 1/2



BLPUJ14



Knurled Extensions

	Length, inches
BLPTXK1.5	1 9/16
BLPTXK2	2 3/32
BLPTXK3	2 15/16
BLPTXK4	4
BLPTXK6	6



BLPTXK3

Sockets



Standard, inches

Size, inches	Stock No.	Length, inches
3/16	BLPS14316	1
7/32	BLPS14732	1
1/4	BLPS1414	1
9/32	BLPS14932	1
5/16	BLPS14516	1
11/32	BLPS141132	1
3/8	BLPS1438	1
7/16	BLPS14716	1
1/2	BLPS1412	1
9/16	BLPS14916	1
5/8	BLPS1458	1



BLPS14716



BLPS1414



Standard, mm

Size, mm	Stock No.	Length, mm
4	BLPSM144	24.8
4.5	BLPSM144.5	24.8
5	BLPSM145	24.8
5.5	BLPSM145.5	24.8
6	BLPSM146	24.8
7	BLPSM147	24.8
8	BLPSM148	24.8
9	BLPSM149	24.8
10	BLPSM1410	24.8
11	BLPSM1411	24.8
12	BLPSM1412	24.8
13	BLPSM1413	24.8
14	BLPSM1414	24.8



BLPSM149



BLPSM1412



BLPSM145



WARNING

- Do not use chrome or industrial finish hand tools with power drivers.
- Read additional safety precautions on pages 534 to 537.



1/4" Drive Sockets



Deep, inches

Size, inches	Stock No.	Length, inches
3/16	BLPLS14316	1 31/32
7/32	BLPLS14732	1 31/32
1/4	BLPLS1414	1 31/32
9/32	BLPLS14932	1 31/32
5/16	BLPLS14516	1 31/32
11/32	BLPLS141132	1 31/32
3/8	BLPLS1438	1 31/32
7/16	BLPLS14716	1 31/32
1/2	BLPLS1412	1 31/32
9/16	BLPLS14916	1 31/32
5/8	BLPLS1458	1 31/32



BLPLS1412 BLPLS1414



Deep, mm



BLPLSM1412 BLPLSM145

Size, mm	Stock No.	Length, mm
4	BLPLSM144	50.0
5	BLPLSM145	50.0
6	BLPLSM146	50.0
7	BLPLSM147	50.0
8	BLPLSM148	50.0
9	BLPLSM149	50.0
10	BLPLSM1410	50.0
11	BLPLSM1411	50.0
12	BLPLSM1412	50.0
13	BLPLSM1413	50.0
14	BLPLSM1414	50.0



8-Point, inches

Size, inches	Stock No.	Length, inches
1/4	BLPS81414	1
5/16	BLPS814516	1
3/8	BLPS81438	1



BLPS81438

Socket Drivers



Hex, inches

Size, inches	Stock No.	Length, inches
1/8	BLPH1418	1 7/16
5/32	BLPH14532	1 7/16
3/16	BLPH14316	1 7/16
7/32	BLPH14732	1 7/16
1/4	BLPH1414	1 7/16
5/16	BLPH14516	1 7/16



BLPH1414



TORX®

BLPTORX1410

Tip Size	Stock No.	Length, inches
T10	BLPTS1410	3/4
T15	BLPTS1415	3/4
T20	BLPTS1420	3/4
T25	BLPTS1425	3/4
T27	BLPTS1427	3/4
T30	BLPTS1430	3/4
T40	BLPTS1440	3/4
T45	BLPTS1445	3/4
T47	BLPTS1447	3/4
T50	BLPTS1450	3/4

BLPTORX1410 TORX® Socket Driver Set. BLPTS1410 thru BLPTS1450 (10 pcs) (T10 to T50).



Flat Tip, inches

Tip Size, inches	Stock No.	Length, inches
5/32	BLPFT14532	1 7/16
7/32	BLPFT14732	1 7/16
9/32	BLPFT14932	1 7/16



BLPFT14732



PHILLIPS®

Tip Size	Stock No.	Length, inches
#0	BLPP140	1 7/16
#1	BLPP141	1 7/16
#2	BLPP142	1 7/16



BLPP142



TORX® / Tamper Resistant

Tip Size	Stock No.	Length, inches
T8	BLPT148TP	1 7/16
T10	BLPT1410TP	1 7/16
T15	BLPT1415TP	1 7/16
T20	BLPT1420TP	1 7/16
T25	BLPT1425TP	1 7/16
T27	BLPT1427TP	1 7/16



BLPT1420TP



Bit Holder and 1/4" Bits



BLPTMBS1414

Stock No.	Description	Size
BLPTMBS1414	Bit Holder (for 1/4" hex bits)	—
BLPTMBS3814	Bit Holder (for 1/4" hex bits)	3/8"
BLPHB18	Hex Bit	1/8"
BLPHB964	Hex Bit	9/64"
BLPHB532	Hex Bit	5/32"
BLPHB316	Hex Bit	3/16"
BLPHB732	Hex Bit	7/32"
BLPHB14	Hex Bit	1/4"
BLPHBM3	Metric Hex Bit	3mm
BLPHBM4	Metric Hex Bit	4mm
BLPHBM5	Metric Hex Bit	5mm
BLPHBM6	Metric Hex Bit	6mm
BLPTB10TP	Tamper Resistant TORX® Bit	T10
BLPTB15TP	Tamper Resistant TORX® Bit	T15
BLPTB20TP	Tamper Resistant TORX® Bit	T20
BLPTB25TP	Tamper Resistant TORX® Bit	T25
BLPTB30TP	Tamper Resistant TORX® Bit	T30
BLPFB532	Flat Tip Bit	5/32"
BLPFB732	Flat Tip Bit	7/32"
BLPFB932	Flat Tip Bit	9/32"
BLPFB316	Flat Tip Bit	3/16"
BLPFB14	Flat Tip Bit	1/4"
BLPPB0	PHILLIPS® Tip Bit	#0
BLPPB1	PHILLIPS® Tip Bit	#1
BLPPB2	PHILLIPS® Tip Bit	#2
BLPPB3	PHILLIPS® Tip Bit	#3
BLPSQB1	Square Tip Bit	#1
BLPSQB2	Square Tip Bit	#2

General Service Starter Sets **3/8" Drive**

Build Your Own Set!

Start with the 206AFSP Handle Set and you've got the ideal basis for creating exactly the basic general service set you need. You can add any of the suggested socket sets or choose from the many special purpose sockets available in both fractional and metric sizes. The 206AFSP Set is packaged in the PB16B Storage Case, which has a large enough cavity to store as many as four rows of standard length sockets, two rows of deep or universal sockets, or combination of any of these.

206AFSP Handle Set

Includes F80 Sealed Ratchet, FU8A Universal Joint, FX1 Extension (1 1/2"), FXK3 Knurled Extension (3"), FXK6 Knurled Extension (6"), and FXK11 Knurled Extension (11") (6 pcs) in the PB16B Storage Case.

Suggested Fractional Set Additions:

211FSY	6-Point Shallow Set
212FY	6-Point Shallow Set
211SFSY	6-Point Deep Set
211SFY	12-Point Shallow Set
207FSU	6-Point Deep Universal Set
211FDSY	12-Point Semi Deep Set

Suggested Metric Set Additions:

212FSMY	6-Point Shallow Set
212SFSMY	6-Point Semi Deep Set
212SFMY	12-Point Deep Set
212FSMSY	6-Point Semi Deep Set
212FMSY	12-Point Semi Deep Set
212FMY	12-Point Shallow Set



206AFSP

General Service Sets

Inches, 6-Point

210AFSP 6-Point General Service Set.

10 Tools Include:

6-Point Shallow Sockets:

FS121	3/8"	FS201	5/8"
FS141	7/16"	FS221	11/16"
FS161	1/2"	FS241	3/4"
FS181	9/16"		

also includes:

F80	Standard Handle Sealed Ratchet
FXK3	3" Extension
FXK6	6" Extension

218AFSP 6-Point General Service Set.

18 Tools Include:

6-Point Shallow Sockets:

FS081	1/4"	FS201	5/8"
FS101	5/16"	FS221	11/16"
FS121	3/8"	FS241	3/4"
FS141	7/16"	FS261	13/16"
FS161	1/2"	FS281	7/8"
FS181	9/16"		

also includes:

F80	Standard Handle Sealed Ratchet
F4LB	Speeder
F10LC	Breaker Bar
FU8A	Universal Joint
FXK3	3" Extension
FXK6	6" Extension
FXK11	11" Extension



210AFSP



222AFSP

222AFSP 6-Point General Service Set.

22 Tools Include:

6-Point

Shallow Sockets:

FS121	3/8"
FS141	7/16"
FS161	1/2"
FS181	9/16"
FS201	5/8"
FS221	11/16"
FS241	3/4"

6-Point

Deep Sockets:

SFS121	3/8"
SFS141	7/16"
SFS161	1/2"
SFS181	9/16"
SFS201	5/8"
SFS221	11/16"
SFS241	3/4"

also includes:

F80	Standard Handle Sealed Ratchet
S9704KA	13/16" Spark Plug Socket
S9706KA	5/8" Spark Plug Socket
F10LC	Breaker Bar
FU8A	Universal Joint
FXK3	3" Extension
FXK4	4" Extension
FXK8	8" Extension
PB17B	Storage Case

Inches, 12-Point



218AFP

248F 12-Point General Service Set.

48 Tools Include:

12-Point

Shallow Sockets:

F081	1/4"
F101	5/16"
F111	11/32"
F121	3/8"
F141	7/16"
F161	1/2"
F181	9/16"
F201	5/8"
F221	11/16"
F241	3/4"
F261	13/16"
F281	7/8"

12-Point

Deep Sockets:

SF081	1/4"
SF101	5/16"
SF121	3/8"
SF141	7/16"
SF161	1/2"
SF181	9/16"
SF201	5/8"
SF221	11/16"
SF241	3/4"
SF261	13/16"
SF281	7/8"

12-Point

Universal Sockets:

FU10A	5/16"
FU12A	3/8"
FU14A	7/16"
FU16A	1/2"
FU18A	9/16"
FU20A	5/8"
FU22A	11/16"
FU24A	3/4"
FU26A	13/16"
FU28A	7/8"
FU30A	15/16"
FU32A	1"

also includes:

F80	Standard Handle Sealed Ratchet
F4LB	Speeder
F5L	Sliding T-Handle
F10LC	Breaker Bar

F40B	Short Shank Driver
FRS70A	Ratchet Spinner
F77	Ratchet Adaptor
FU8A	Universal Joint
FXK3	3" Extension

FXK4	4" Extension
FXK6	6" Extension
FXK11	11" Extension
FX61A	Flexible Extension
KRA250B	Metal Box (optional)



248F

3/8" Drive General Service Sets

Inches, 6/12-Point

292F 6/12-Point General Service Set. 92 Tools Include:

- | | |
|--|---|
| 6-Point Shallow Sockets: | Shallow, 6-Point (11 pcs) (1/4" to 7/8") |
| 6-Point Deep Sockets: | Deep, 6-Point (11 pcs) (1/4" to 7/8") |
| 12-Point Deep Sockets: | Deep, 12-Point (11 pcs) (1/4" to 7/8") |
| 12-Point Shallow Sockets: | Shallow, 12-Point (12 pcs) (1/4" to 7/8") |
| 12-Point Shallow Universal Sockets: | Universal, Shallow, 12-Point (12 pcs) (5/16" to 1") |

also includes:

- | | |
|---|--|
| F80 Standard Handle Sealed Ratchet | FX61A Flexible Extension |
| FLF80 Sealed Flex Head Ratchet | GF22 Drag Link Socket |
| F4LB Speeder | F23E 1/4" Flat Tip Socket Driver |
| F5L Sliding T-Handle | F25E 5/16" Flat Tip Socket Driver |
| F10LC Breaker Bar | F31E 3/8" Flat Tip Socket Driver |
| F40B Short Shank Driver | F29A 3/8" Clutch Type Driver |
| FRS70A Ratchet Spinner | F30E 5/16" Clutch Type Driver |
| F77 Ratchet Adaptor | FA5E 5/32" Hex Driver |
| FU8A Universal Joint | FA6E 3/16" Hex Driver |
| FX1 1 1/2" Extension | FA7E 7/32" Hex Driver |
| FXK3 3" Extension | FA8E 1/4" Hex Driver |
| FXK4 4" Extension | FA10E 5/16" Hex Driver |
| FXK6 6" Extension | FA12E 3/8" Hex Driver |
| FXK8 8" Extension | |
| FXK11 11" Extension | |



292F

- | |
|---|
| FP22E #2 PHILLIPS® Driver |
| FP32E #3 PHILLIPS® Driver |
| FP42E #4 PHILLIPS® Driver |
| PP409A 9/32" Pipe Plug Socket |
| PP410A 5/16" Pipe Plug Socket |
| PP412A 9/32" Pipe Plug Socket |
| S9704KFUA 13/16" Spark Plug Universal Socket |

Metric, 6-Point

222AFSMP 6-Point Metric General Service Set. 22 Tools Include:

- | | | |
|---------------------------------|------------------------------|---|
| 6-Point Shallow Sockets: | 6-Point Deep Sockets: | also includes: |
| FSM101 10mm | SFSM10 10mm | F80 Standard Handle Sealed Ratchet |
| FSM111 11mm | SFSM11 11mm | FU8A Universal Joint |
| FSM131 13mm | SFSM13 13mm | F10LC Breaker Bar |
| FSM141 14mm | SFSM14 14mm | FXK3 3" Extension |
| FSM151 15mm | SFSM15 15mm | FXK4 4" Extension |
| FSM171 17mm | SFSM17 17mm | FXK8 8" Extension |
| FSM191 19mm | SFSM19 19mm | S9704KA 13/16" Spark Plug Socket |
| | | S9706KA 5/8" Spark Plug Socket |
| | | PB17B Storage Case |



222AFSMP

Metric, 6/12-Point

262MFB 6/12-Point Metric General Service Set. 62 Tools Include:

- | | | | |
|---------------------------------|----------------------------------|-------------------------------|---|
| 6-Point Shallow Sockets: | 12-Point Shallow Sockets: | 12-Point Deep Sockets: | 6-Point Shallow Universal Sockets: |
| FSM81 8mm | FM9 9mm | SFM8 8mm | FSUM7 7mm |
| FSM91 9mm | FM10 10mm | SFM9 9mm | FSUM8 8mm |
| FSM101 10mm | FM11 11mm | SFM10 10mm | FSUM10 10mm |
| FSM111 11mm | FM12 12mm | SFM11 11mm | FSUM11 11mm |
| FSM121 12mm | FM13 13mm | SFM12 12mm | FSUM12 12mm |
| FSM131 13mm | FM14 14mm | SFM13 13mm | FSUM13 13mm |
| FSM141 14mm | FM15 15mm | SFM14 14mm | FSUM14 14mm |
| FSM151 15mm | FM16 16mm | SFM15 15mm | FSUM15 15mm |
| FSM161 16mm | FM17 17mm | SFM16 16mm | FSUM16 16mm |
| FSM171 17mm | FM18 18mm | SFM17 17mm | FSUM17 17mm |
| FSM181 18mm | FM19 19mm | SFM18 18mm | FSUM18 18mm |
| FSM191 19mm | | SFM19 19mm | FSUM19 19mm |
| | | | FSUM21 21mm |
| | | | FSUM22 22mm |
| | | | FSUM24 24mm |

also includes:

- | | | |
|---|-------------------------------|---|
| F80 Standard Handle Sealed Ratchet | FRS70A Ratchet Spinner | FXK11 11" Extension |
| F4LB Speeder | F77 Ratchet Adaptor | FX61A Flexible Extension |
| F10LC Breaker Bar | FU8A Universal Joint | S9704KA 13/16" Spark Plug Socket |
| F40B Short Shank Driver | FXK3 3" Extension | KRA250B Metal Box |
| | FXK6 6" Extension | |



262MFB

Ratchets 3/8" Drive

Dual 80™ Technology Ratchets

Stop, Turn and Listen. Introducing the smoothest, strongest ratchets on the planet. You have to try them to believe them.

Dual 80™ Technology Ratchet Features:

- 80 tooth gear
- 7 teeth in contact with gear to provide strength and durability
- Ratchet Arc - Dual 80™ Technology ratchet has 25% less ratcheting arc and requires the least amount of arc to engage the next gear tooth
- Sealed Head keeps dirt and other contaminants out of the head mechanism



High Strength Sealed Head Ratchets

High Strength Sealed Ratchets

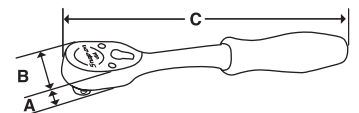
Patented design features high tech seals and special O-rings to seal in permanent lubrication and seal out dust, dirt, moisture, and other contaminants. You get a smooth running ratchet without the responsibility of routine maintenance. U.S. Patent 4,934,220 and 6,125,722.



Round Head Ratchet

Round Head Ratchet

Round Head ratchets feature a slim design—plus a strong 72 tooth gear action for use in confined areas.



Dual 80 Technology Ratchets									
Model	Handle Type	Sealed	Teeth	Angle	A	B	C	Kit	
F80	Standard Handle	Sealed	80	4.5°	1/2	1 3/16	7 11/32	RKRF80	
FL80	Long Handle	Sealed	80	4.5°	1/2	1 3/16	10 9/16	RKRF80	
FLF80*	Long Flex Head	Sealed	80	4.5°	1/2	1 3/16	11 1/2	RKRF80	
FBF80*	Bent Handle Flex Head	Sealed	80	4.5°	1/2	1 3/16	11 1/8	RKRF80	
FX80**	Locking Flex Head	Sealed	80	4.5°	1/2	1 3/16	11 1/4	RKRF80	
FKF80	Stubby Flex Head	Sealed	80	4.5°	1/2	1 3/16	4 3/4	RKRF80	
FK80	Stubby Handle	Sealed	80	4.5°	9/16	1 3/16	4 3/4	RKRF80	
High Strength Sealed Heads									
FC936	Short Handle	Sealed	36	10°	7/16	7/8	4 7/16	RKRF936	
FCF936	Short Flex Head	Sealed	36	10°	7/16	7/8	6 1/8	RKRF936	
FR936	Quick Release	Sealed	36	10°	5/8	1 5/32	7 11/32	RKRF936	
FOD Ratchets									
F936FOD	Standard Handle	Sealed	36	10°	5/8	1 5/32	7 11/32	—	
Round Ratchet									
F872	Standard Handle	Round	72	5°	9/16	1 1/4	7 19/32	RKRF872B	

ASME/ANSI B107-10M-1996

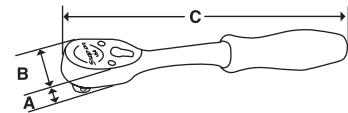
* Uses RKRF841JT Flex Joint Repair Kit

** Uses RKRF841JT Flex Joint Repair Kit and RKRF841LM Locking Mechanism Repair Kit.

3/8" Drive Ratchets



Round Head Ratchets



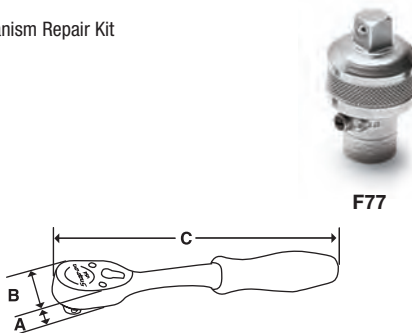
Comfort Handle Ratchets

						A	B	C	
<i>Dual 80 Technology Ratchets</i>									
FH80	Standard Length	Sealed	Comfort	80	4.5°	1/2	1 3/16	9 9/16	RKRF80
FHL80	Long Handle	Sealed	Comfort	80	4.5°	1/2	1 3/16	12 1/2	RKRF80
FHF80*	Flex Head	Sealed	Comfort	80	4.5°	1/2	1 3/16	9 9/16	RKRF80
FHLF80*	Long Flex Head	Sealed	Comfort	80	4.5°	1/2	1 3/16	13 5/8	RKRF80
FHB80*	Bent Handle Flex Head	Sealed	Comfort	80	4.5°	1/2	1 3/16	13 5/16	RKRF80
FHO80*	Offset Flex Head	Sealed	Comfort	80	4.5°	1/2	1 3/16	9 15/16	RKRF80
FHX80**	Locking Flex Head	Sealed	Comfort	80	4.5°	1/2	1 3/16	11 7/8	RKRF80
<i>Round Head</i>									
FH747	Swivel Head	Compact Round	Comfort	39	9°	3/8	1 7/32	6 13/16	—
FH747	Long Swivel Head	Round	Comfort	36	7°	11/16	1 3/4	12 3/4	RKRF749

ASME/ANSI B107-10M-1996

* Uses RKRF841JT Flex Joint Repair Kit

** Uses RKRF841JT Flex Joint Repair Kit and RKRF841LM Locking Mechanism Repair Kit



Specialty Ratchets

						A	B	C	
FZ936A	Multi-Purpose	Sealed	—	36	10°	5/8	1 5/32	3 1/16	RKRF936
F77	Ratchet Adaptor	—	—	20	18°	11/16	11/16	2 1/16 (dia.)	—
PALMRAT	Palm Style	—	Black	20	18°	1 3/16	—	2 5/8	RKRPALMRAT

Ratchet Spinner

FRS70A	Ratchet Spinner	—	—	—	—	1 9/32	—	1 1/4 (dia.)	—
---------------	-----------------	---	---	---	---	--------	---	--------------	---

ASME/ANSI B107.10M-1996

Accessories **3/8" Drive**



FXKV4



FXKV7



202FXKV



Extensions - Friction Ball

		A	B
FX1	GFX1	1/2	1 1/2
FXK3	GFXK3	13/32	3
FXK4	—	13/32	4
FXK6	GFXK6	13/32	6
FXK8	GFXK8	13/32	8
FXK11	GFXK11	13/32	11
FX18	—	1/2	18
FX24A	—	1/2	24
FX36	—	1/2	36

*Knurling at the drive end provides for easy fingertip turning.

208AFX Extension Set. FX1 thru FX24A (8 pcs) (1 1/2" to 24") in a storage tray.

206AFX Extension Set. FX1 thru FXK11 (6 pcs) (1 1/2" to 11") in a storage tray.

Extensions / Variable Length

Reach recessed fasteners quicker and easier in limited access applications. Applications include limited access areas around water pumps, fuel pumps and turbo mounting bolts. Spring loaded extension maintains contact with fastener. A low clearance problem solver. Precision cold forged construction for robust performance. Chamfered drive ends for easy engagement. Knurled for easy hand turning. Nickel/chrome plating helps protect against corrosion and makes it easy to wipe clean.



Extended Length, inches

FXKV4	4
FXKV7	7

202FXKV Variable Length Extension Set. FXKV4 and FXKV7 (2 pcs.) in storage tray.

Quick Release Extensions - Locking

The quick release sleeve releases socket from extension quickly and easily. Knurling at the drive end provides for easy fingertip turning.

	A	B
FXKL3	1/2	3
FXKL6	1/2	6
FXKL11	1/2	11
FXKL24	1/2	24

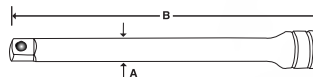
204FXKL Locking Extension Set. FXKL3 thru FXKL24 (4 pcs) (3", 6", 11", 24") in a storage tray.

FXKLP Pins. Locking pins for FXKL Series Extensions. Pack of 5.

FXKLRK Repair Kit. Repair kit for FXKL Series Extensions.



FXKL6



FXWK6

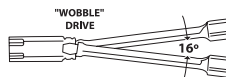


FXWP6

Wobble Extensions

Wobble function provides 16° of additional accessibility. Knurled shanks for easy fingertip turning.

	A	B
FXW1	1/2	1 1/2
FXWK3*	13/32	3
FXWK4*	13/32	4
FXWK6*	13/32	6
FXWK8*	13/32	8
FXWK11*	13/32	11



*Knurled

206AFXW Wobble Extension Set. FXW1 thru FXWK11 (6 pcs) (1 1/2" to 11") in a storage tray.

Wobble Plus Extensions

Extensions are usable in both wobble and rigid functionality. Wobble function provides 16° of additional accessibility. Knurled shanks for easy fingertip turning.

	A	B
FXWP1	1/2	1 1/2
FXWP3*	13/32	3
FXWP4*	13/32	4
FXWP6*	13/32	6
FXWP8*	13/32	8
FXWP11*	13/32	11

*Knurled

206AFXWP Wobble Plus Extension Set.

FXWP1 thru FXWP11 (6 pcs) (1 1/2" to 11") in a storage tray.



WARNING

- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.



3/8" Drive Accessories

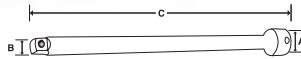


GAX12

Extension Adaptors

	A	B	C
GAX5	1/2	3/8	5
GAX12	1/2	3/8	12
GAX24	1/2	3/8	23 1/4
GAX36	1/2	3/8	36

ASME/ANSI B107.10M-1996



FZ1

Extension Connectors

FZ1 Extension Connector. 3/8" drive extension connector adds versatility to extensions, breaker bars, ratchets and crowfoot wrenches. Connect one or more tools together to make different shapes, lengths and angles to easily reach limited access fasteners. Use in automotive, aircraft, marine, heavy truck, plumbing and manufacturing applications. Specific applications include transmission bell housing bolts, engine mounts behind semi truck dash boards, radiator fans, belt tensioners and crankshaft bolts.

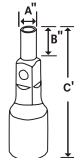
FZ2 Extension Connector Set. Set of two FZ1 Extension Connectors.

Magnetic Adaptors

	A	B	C
FXM112	5/16	9/32	1 25/32
FXM18	3/16	9/32	1 25/32



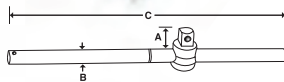
FXM18



F5L

Sliding T-Handle

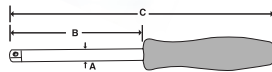
	A	B	C
F5L	3/4	13/32	8



SGF50BR



F40B

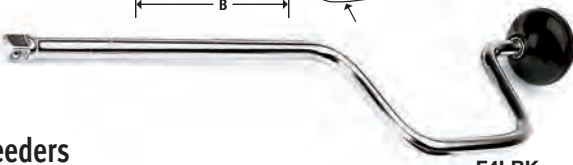
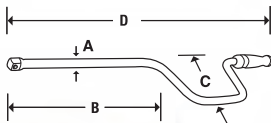


Handled Drivers

	A	B	C
SGF50BR*	1/2	3 3/32	8
F40B**	1/2	1	5 5/16

*New Instinct™ Handle provides maximum turning power and greater comfort. Six specially designed curves and flutes provide fingertip control and aids in spinning. Nickel/chrome plating helps protect against corrosion and promotes easy clean up.

** Internal square drive in handle allows use with various handles.



F4LBK

Speeders

	A	B	C	D
F4LB	13/32	7 7/8	3 1/2	17 27/32
F4LBK*	13/32	7 7/8	3 1/2	16 5/8

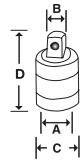
*Speeder with knob.



1206GS



A2A



Adaptors

		A	B	C
—	GFAT1E	3/8	1/4	1 1/4
TA3	GTA3	1/4	3/8	15/16
A2A	GAFA2A	3/8	1/2	1 5/16
—	GSAF1E	1/2	3/8	1 13/16

206EAU Adaptor/Extension Set.

Includes GFAT1E and A2A Adaptors (pg. 122); FU8A Universal Joint (pg. 122) and FX1, FXK3, and FXK6 Extensions (pg. 121) (6 pcs) in a storage tray.

1206GS Combination Drive Adaptor Set.

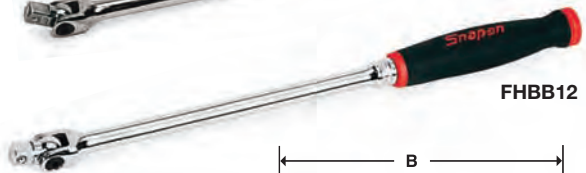
Includes 1/4" drive GFAT1E and TA3 Adaptors (pg. 103); 3/8" drive A2A and GSAF1E Adaptors (pg. 122) and 1/2" drive GLA12B and GLAS1E Adaptors (pg. 146) (6 pcs).



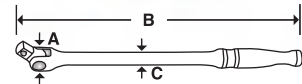
F10LC



F12LA



FHBB12

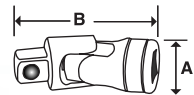


Breaker Bars

	A	C	B	
F10LC	3/4	15/32	9 9/16	RKBB2
F12LA	13/16	15/32	11 9/16	RKBB2
FHBB12	13/16	15/32	13	RKBB2



103UFTS



Universal Joints

		A	B
FUBA•	GFUBA	3/4	2 1/16
FUB0B•	—	1 1/16	1 11/16
FUB8A*	—	3/4	2 5/16

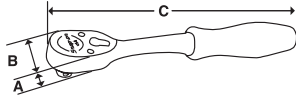
*Swivel Universal Joint •ASME/ANSI B107.B10M-1996

103UFTS Combination Drive Universal Joint Set. Includes 1/4" drive TMU8B (pg. 103), 3/8" drive FU8A (pg. 122), and 1/2" drive S8 (pg. 147) Universal Joints (3 pcs) in a storage tray.



FU8A

Non-Conductive Composite Ratchets, 3/8" Drive Sockets and Accessories



CFS949A

Non-Conductive Composite Ratchet

					A	C	B	
CFS949A	Round	Orange	49	7.3°	1 1/4	8 3/4	1 19/32	RKRCFS949

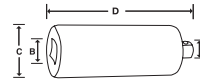
Non-Conductive Composite Adaptors

Each tool is individually tested to ensure protection up to 1000V. These tools meet or exceed European Standards EN60900 and IEC60900 for dielectric strength tests and design requirements, ASTM 1505 and VDE 0680, Type Test Requirements. These tools meet or exceed ASME B107.1, B107.10M, ISO 1711 and ISO 3315 strength requirements for standard, non-insulated steel tools. U.S. Patents 5,394,773, 5,448,932, and 5,875,693 apply.



CA1MF

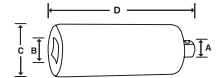
	A	B	C	D
CA1MF	3/8	1/2	1 5/16	3 25/32
CA2A	1/2	3/8	1	3 7/8



Non-Conductive Composite Extensions

Each tool is individually tested to ensure protection up to 1000V. These tools meet or exceed European Standards EN60900 and IEC60900 for dielectric strength tests and design requirements, ASTM 1505 and VDE 0680, Type Test Requirements. These tools meet or exceed B107.10M and ISO 3315 strength requirements for standard, non-insulated steel tools. U.S. Patents 5,394,773, 5,448,932, and 5,875,693 apply.

	B	C	D
CFX3	3/8	.990	3
CFX6	3/8	2	6
CFX12	3/8	2	12



CFX6

No conductive path to user. No insulation to puncture, tear or wear through. Strong as steel. Every tool is individually tested to ensure protection up to 1000VAC and 1500VDC. Only Snap-on® non-conductive tools are UL Listed assuring the customer compliance to IEC60900. Lifetime warranty for material and workmanship. U.S. Patents 5,970,826 and 6,126,882 apply



IHT208K



207CFDSY



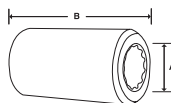
CFDS16B



CFDSM15B

Non-Conductive Composite Sockets

		A	B
1/4	CFDS8B	15/16	1 3/4
5/16	CFDS10B	15/16	1 3/4
3/8	CFDS12B	1	1 3/4
7/16	CFDS14B	1	1 3/4
1/2	CFDS16B	1 3/16	2
9/16	CFDS18B	1 3/16	2
5/8	CFDS20B	1 3/16	2
11/16	CFDS22B	1 3/8	2 1/4
3/4	CFDS24B	1 3/8	2 1/4



Non-Conductive Composite Sockets

		A	B
10	CFDSM10B	25.1	44.9
12	CFDSM12B	29.6	51.2
13	CFDSM13B	29.6	51.2
14	CFDSM14B	29.6	51.2
15	CFDSM15B	29.6	51.2
16	CFDSM16B	33.5	57.4
17	CFDSM17B	33.5	57.4
18	CFDSM18B	33.5	57.4
19	CFDSM19B	33.5	57.4

IHT208K Insulating Composite Ratchet and Socket Set. CFDS12B thru CFDS24B Sockets (8 pcs) (3/8" to 3/4") plus CFS949A Ratchet in C0800 Kit Bag.

207CFDSY Insulating Composite Socket Set. CFDS12B thru CFDS24B Sockets (7 pcs) (3/8" to 3/4").

WARNING

- Do not use power sockets or accessories with impact drivers.
- Do not hold swivel joint tools during use.
- Do not use chrome or industrial finish hand tools with power drivers.
- Do not use damaged tools.
- Be properly trained.
- Misuse, shock, or broken tools can cause injury.
- Read additional safety precautions on pages 534 to 537.



3/8" Drive FLANK DRIVE® Sockets



FS201

F201

GF201

Shallow

			A	B	C	D	E	
1/4	FS081	F081	GF081	13/32	11/16	7/16	29/32	7/32
5/16	FS101	F101	GF101	15/32	11/16	7/16	29/32	1/4
11/32	FS111	F111	GF111	1/2	11/16	7/16	29/32	9/32
3/8	FS121	F121	GF121	9/16	11/16	7/16	29/32	9/32
7/16	FS141	F141	GF141	5/8	11/16	7/16	29/32	9/32
1/2	FS161	F161	GF161	23/32	11/16	1/2	15/16	5/16
9/16	FS181	F181	GF181	25/32	3/4	1/2	1 1/32	3/8
19/32	—	—	GF191	13/16	25/32	9/16	1 1/32	3/8
5/8	FS201	F201	GF201	27/32	29/32	19/32	1 3/32	1/2
11/16	FS221	F221	GF221	15/16	7/8	5/8	1 1/8	17/32
3/4	FS241	F241	GF241	1	15/16	11/16	1 3/16	15/32
13/16	FS261	F261	GF261	1 1/16	1	11/16	1 7/32	1/2
7/8	FS281	F281	GF281	1 5/32	1 1/32	23/32	1 9/32	9/16
15/16	FS301	F301	GF301	1 1/4	1 3/16	25/32	1 11/32	9/16
1	FS321	F321	GF321	1 5/16	1 1/4	13/16	1 3/8	19/32

ASME/ANSI B107.1-1993

6-Point Chrome Sets:

211FSY 6-Point Shallow Set. FS081 thru FS281 (except FS111) (11 pcs) (1/4" to 7/8").

214FSY 6-Point Shallow Set. FS081 thru FS321 (14 pcs.) (1/4" to 1").

6-Point Chrome Shallow/Deep Set:

222SFFS 6-Point Shallow/Deep Set. FS081 thru FS281 (except FS111)

6-Point Shallow Sockets (pg. 124) plus SFS081 thru SFS281 (except SFS111)

6-Point Deep Sockets (pg. 125) (22 pcs) (1/4" to 7/8").

12-Point Chrome Set:

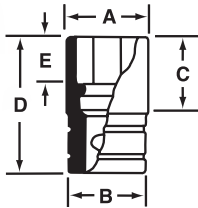
211FY 12-Point Shallow Set. F081 thru F281 (except F111 & F191) (11 pcs) (1/4" to 7/8").



211FSY



222SFFS



FM14



FSM141

Shallow

				A	B	C	D	E
6	FSM61	—	—	9.1	17.2	11.1	23.0	5.6
7	FSM71	—	—	10.4	17.2	11.1	23.0	5.6
8	FSM81	FM8	—	11.6	17.2	11.1	23.0	6.4
9	FSM91	FM9	GFM9A	13.1	17.2	11.0	23.0	7.1
10	FSM101	FM10	—	14.3	17.2	11.0	23.0	7.1
11	FSM111	FM11	—	15.4	17.2	11.0	23.0	7.1
12	FSM121	FM12	—	16.5	17.2	11.9	23.8	8.1
13	FSM131	FM13	—	18.0	17.2	12.6	24.6	8.1
14	FSM141	FM14	—	19.6	18.6	13.2	26.2	9.1
15	FSM151	FM15	—	20.3	19.4	13.7	27.0	9.1
16	FSM161	FM16	—	21.1	20.2	15.0	27.8	10.4
17	FSM171	FM17	—	22.7	21.8	15.0	28.6	10.4
18	FSM181	FM18	—	24.3	23.2	15.7	28.6	10.9
19	FSM191	FM19	—	25.1	24.0	16.3	30.2	11.9
20	FSM201	FM20	—	26.3	25.3	16.6	40.0	12.4
21	FSM211	FM21	—	27.4	26.4	17.4	31.8	12.2
22	FSM221	FM22	—	28.3	27.2	17.4	32.5	13.2
23	FSM231	FM23	—	29.9	28.8	18.2	33.8	13.2
24	FSM241	FM24	—	31.5	30.5	19.0	35.0	14.4
25	FSM251	—	—	32.3	31.3	19.8	35.3	14.5
26	FSM261	FM26	—	33.8	32.9	20.6	37.0	14.3

Metric 6-Point Chrome Set:

212FSMY Metric 6-Point Shallow Set. FSM81 thru FSM191 (12 pcs) (8 to 19mm).

Metric 12-Point Chrome Set:

212FMY 12-Point Metric Shallow Set. FM8 thru FM19 (12 pcs) (8 to 19mm).

Metric 6-Point Chrome Shallow/Deep Set:

224SFFSM Metric 6-Point Shallow/Deep Set. FSM81 thru FSM191 Shallow Sockets (pg. 124) plus SFSM8 thru SFSM19 Deep Sockets (pg. 126) (24 pcs) (8 to 19mm).



212FSMY






212FMY



224SFFSM

FLANK DRIVE® Sockets 3/8" Drive

Semi Deep

			A	B	C	D	E
1/4	FSS081		13/32	11/16	1 1/8	1 5/8	7/32
5/16	FSS101	FDS101	15/32	11/16	1 1/8	1 5/8	9/32
3/8	FSS121	FDS121	9/16	11/16	1 1/8	1 5/8	5/16
7/16	FSS141	FDS141	5/8	11/16	1 1/8	1 5/8	3/8
1/2	FSS161	FDS161	23/32	11/16	31/32	1 5/8	13/32
9/16	FSS181	FDS181	25/32	51/64	31/32	1 5/8	13/32
5/8	FSS201	—	27/32	51/64	31/32	1 5/8	13/32
11/16	FSS221	—	15/16	7/8	31/32	1 5/8	7/16
3/4	FSS241	—	1	15/16	31/32	1 5/8	15/32
13/16	FSS261	—	1 1/16	1	31/32	1 5/8	1/2
7/8	FSS281	—	1 5/32	1 3/32	31/32	1 5/8	17/32

211FSSY 6-Point Semi Deep Set. FSS081 thru FSS281 (11 pcs)
(1/4" to 7/8").






FSS201



FSMS14

Semi Deep

			A	B	C	D	E
8	FSMS8	FMS8	11.4	17.2	29.3	41.3	7.1
9	FSMS9	FMS9	12.8	17.2	29.3	41.3	7.1
10	FSMS10	FMS10	14.3	17.2	29.3	41.3	7.9
11	FSMS11	—	15.7	17.2	29.3	41.3	9.7
12	FSMS12	FMS12	16.5	17.2	29.3	41.3	9.9
13	FSMS13	FMS13	17.9	17.2	23.2	41.3	10.7
14	FSMS14	FMS14	19.6	18.6	23.2	41.3	10.7
15	FSMS15	FMS15	20.3	19.4	23.2	41.3	10.7
16	FSMS16	FMS16	21.1	20.2	23.0	41.3	10.7
17	FSMS17	FMS17	22.6	21.8	23.0	41.3	11.2
18	FSMS18	FMS18	24.2	23.2	23.0	41.3	11.2
19	FSMS19	—	25.1	24.0	22.7	41.3	11.7

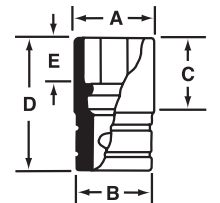
212FSMSY Metric 6-Point Semi Deep Set. FSMS8 thru FSMS19 (12 pcs)
(8 to 19mm).








GFS181



SFS201



Deep

					A	B	C	D	E
1/4	SFS081	SF081	GSFS081	GSF081	15/32	11/16	1 11/16	2 1/8	1/4
5/16	SFS101	SF101	GSFS101	GSF101	15/32	11/16	1 11/16	2 1/8	7/32
11/32	SFS111	—	—	—	1/2	11/16	1 11/16	2 1/8	9/32
3/8	SFS121	SF121	—	GSF121	9/16	11/16	1 11/16	2 1/8	5/16
7/16	SFS141	SF141	—	GSF141	5/8	11/16	1 11/16	2 1/8	3/8
1/2	SFS161	SF161	—	GSF161	23/32	11/16	1 11/16	2 1/8	7/16
9/16	SFS181	SF181	—	GSF181	25/32	23/32	1 29/32	2 3/8	7/16
19/32	—	SF191	—	—	13/16	25/32	1 29/32	2 3/8	7/16
5/8	SFS201	SF201	—	GSF201	27/32	13/16	1 29/32	2 3/8	15/32
11/16	SFS221	SF221	—	GSF221	15/16	7/8	2 3/16	2 5/8	1/2
3/4	SFS241	SF241	—	GSF241	1	1	2 3/16	2 5/8	5/8
13/16	SFS261	SF261	—	GSF261	1 1/16	1	2 1/4	2 3/4	5/8
7/8	SFS281	SF281	—	GSF281	1 5/32	1 1/8	2 1/4	2 3/4	23/32
15/16	SFS301	SF301	—	GSF301	1 1/4	1 3/16	2 1/4	2 3/4	23/32
1	SFS321	SF321	—	GSF321	1 5/16	1 1/4	2 1/4	2 3/4	13/16

ASME/ANSI B107.1-1993

6-Point Chrome Set:

211SFSY 6-Point Deep Set. SFS081 thru SFS281 (except SFS111) (11 pcs) (1/4" to 7/8").

12-Point Chrome Sets:

211SFY 12-Point Deep Set. SF081 thru SF281 (except SF191) (11 pcs) (1/4" to 7/8").

214SFY 12-Point Deep Set. SF081 thru SF321 (14 pcs) (1/4" to 1").



211SFSY



211SFY



WARNING

- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.



3/8" Drive FLANK DRIVE® Sockets



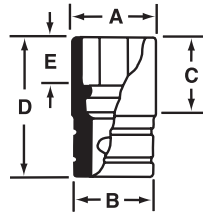
212SFMY



212SFSMY

Deep

mm	6		12		A	B	C	D	E
	SFSM	SFM	SFSM	SFM					
6	SFSM6	SFM6			9.1	17.2	42.0	54.0	5.6
7	SFSM7	SFM7			10.5	17.2	42.0	54.0	5.6
8	SFSM8	SFM8			11.4	17.7	42.0	54.0	7.1
9	SFSM9	SFM9			12.8	17.2	42.0	54.0	7.1
10	SFSM10	SFM10			14.3	17.2	42.0	54.0	7.9
11	SFSM11	SFM11			15.7	17.2	42.0	54.0	9.7
12	SFSM12	SFM12			16.5	17.2	42.0	54.0	9.9
13	SFSM13	SFM13			18.0	17.2	42.0	54.0	10.7
14	SFSM14	SFM14			19.6	18.6	43.3	60.3	10.7
15	SFSM15	SFM15			20.3	19.4	43.3	60.3	10.7
16	SFSM16	SFM16			21.1	20.0	43.3	60.3	10.7
17	SFSM17	SFM17			22.7	21.8	43.6	66.7	11.2
18	SFSM18	SFM18			24.3	23.2	49.0	66.7	11.2
19	SFSM19	SFM19			25.1	24.0	49.0	66.7	15.5
20	SFSM20	—			26.3	25.3	48.1	66.7	12.2
21	SFSM21	—			27.5	26.4	47.6	66.7	12.4



SFM19



SFSM14

6-Point Chrome Set:

212SFSMY Metric 6-Point Deep Set. SFSM8 thru SFSM19 (12 pcs) (8 to 19mm).

12-Point Chrome Set:

212SFMY Metric 12-Point Deep Set. SFM8 thru SFM19 (12 pcs) (8 to 19mm).

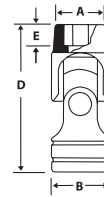
FLANK DRIVE® Universal Sockets



FS16B



FU16B



Shallow

mm	6		12		A	B	D	E
	FS	FU	FS	FU				
5/16	—	—	FU10B	—	15/32	11/16	1 5/8	1/4
3/8	FS12B	—	FU12B	—	17/32	11/16	1 5/8	1/4
7/16	FS14B	—	FU14B	—	5/8	11/16	1 5/8	9/32
1/2	FS16B	—	FU16B	—	23/32	11/16	1 11/16	9/32
9/16	FS18B	—	FU18B	—	25/32	11/16	1 23/32	11/32
5/8	FS20B	—	FU20B	—	27/32	11/16	1 25/32	3/8
11/16	FS22B	—	FU22B	—	15/16	3/4	2	3/8
3/4	FS24B	—	FU24B	—	1	3/4	2 1/16	7/16
13/16	—	—	FU26B	—	1 3/32	3/4	2 3/32	15/32
7/8	—	—	FU28B	—	1 5/32	3/4	2 3/32	1/2
15/16	—	—	FU30B	—	1 1/4	3/4	2 9/32	9/16
1	—	—	FU32B	—	1 5/16	3/4	2 9/32	9/16

6-Point Chrome Set:

206AFSA 6-Point Shallow Set. FS14B thru FS24B (6 pcs) (7/16" to 3/4").

12-Point Chrome Set:

206FUA 12-Point Shallow Set. FU14B thru FU24B (6 pcs) (7/16" to 3/4").



206AFSA

FLANK DRIVE® Universal Sockets 3/8" Drive

Shallow

mm	6	12	A	B	D	E
8	FSUM8A	—	11.9	17.2	43.1	6.4
10	FSUM10A	FUM10A	14.0	18.1	43.5	6.4
11	FSUM11A	—	15.3	18.1	43.5	7.1
12	FSUM12A	FUM12A	16.8	18.1	45.5	7.9
13	FSUM13A	FUM13A	18.1	18.1	45.5	7.9
14	FSUM14A	FUM14A	18.9	18.1	47.9	8.9
15	FSUM15A	FUM15A	20.5	18.1	47.9	8.9
16	FSUM16A	FUM16A	21.3	18.1	47.9	10.2
17	FSUM17A	FUM17A	22.9	18.9	50.7	10.4
18	FSUM18A	FUM18A	24.5	18.9	50.7	10.7
19	FSUM19A	FUM19A	25.3	18.9	52.5	11.7
22	FSUM22A	—	28.4	18.9	53.9	13.0

6-Point Chrome Set:

206FSUMA Metric 6-Point Shallow Set. FSUM10A thru FSUM17A (except FSUM11A and FSUM16A) (6 pcs) (10 to 17mm).

12-Point Chrome Set:

209FUMY Metric 12-Point Shallow Set. FUM10A thru FUM19A (9 pcs.) (10 to 19mm).



FSUM17A



FUM18A



206FSUMA



209FUMY



207FSU



FSU16

Deep

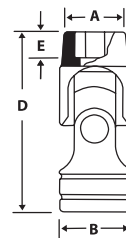
mm	6	A	B	D	E
3/8	FSU12	9/16	11/16	2 13/32	3/8
7/16	FSU14	5/8	11/16	2 13/32	7/16
1/2	FSU16	23/32	11/16	2 13/32	15/32
9/16	FSU18	25/32	11/16	2 13/32	17/32
5/8	FSU20	27/32	11/16	2 13/32	9/16
11/16	FSU22	15/16	3/4	2 15/32	9/16
3/4	FSU24	1	3/4	2 15/32	9/16

6-Point Chrome Set:

207FSU 6-Point Deep Set. FSU12 thru FSU24 (7 pcs) (3/8" to 3/4").



SFSUM14



Deep

mm	6	A	B	D	E
10	SFSUM10	14.4	18.1	63.6	7.4
11	SFSUM11	15.6	18.1	63.6	7.6
12	SFSUM12	17.1	18.1	63.6	8.1
13	SFSUM13	18.1	18.1	63.6	8.4
14	SFSUM14	18.9	18.1	63.6	9.1
15	SFSUM15	20.5	18.1	63.6	9.7
16	SFSUM16	21.3	18.1	63.6	10.4
17	SFSUM17	22.9	18.9	63.6	10.9
24	SFSUM24	31.6	18.9	63.6	14.7

6-Point Chrome Set:

206SFSUM Metric 6-Point Deep Set. SFSUM10 thru SFSUM17 (except SFSUM11 and SFSUM16) (6 pcs) (10 to 17mm).



206SFSUM

WARNING

- Do not use chrome or industrial finish hand tools with impact drivers.
- Use only moderate force on flare nut sockets.
- Read additional safety precautions on pages 534 to 537.



3/8" Drive Special Purpose Sockets

Retention Spark Plug Sockets

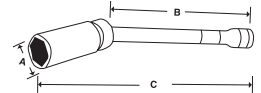
#		A	B	C
5/8	S9706KRFUA	N/A	27/32 (21.2)	3 3/4 (94.2)
5/8	S9706KRA	11/16	27/32 (21.2)	2 7/8 (73)
9/16	S9716KR	5/8	25/32 (19.6)	2 3/8 (60.3)
13/16	S9704KR	7/8	1 1/16 (26.7)	2 27/32 (72.1)
14mm	S9714MKR	16mm	19.6mm	60.3mm

Patented tapered hex design (U.S. Patent No. 6,626,067) securely retains spark plug in socket without rubber insert or magnet. Patented "Diamond Wedge" design with six wedges equally align plug in the center to avoid damage to the porcelain. Spark plug is easily disengaged from the socket by applying gentle side pressure to break the contact. Spark plug configuration is cold formed for extended tool life. External hex on standard models for restricted access applications. Knurled surface for finger tightening/removal. Side through hole for secure extension retention for coil on plug applications. Sockets are not Flank Drive® configuration and conform to ANSI B107.34M-1997.

S9706KRA / S9706KRFUA Applications - 4.7L engines used on Jeep Commander and Grand Cherokee, Dodge Ram, Durango and Dakota plus Chrysler Aspen. General applications on autos, light trucks, motorcycles and power equipment.

S9716KR Applications - 2005 Ford Mustang (4.6L, 3-valve engine) and Ford 2004 F150 (5.4L V8, 3-valve engine).

S9714MKR Applications - 14mm spark plugs used in Nissan 1.8L Versa and 2.0L Sentra.



FLANK DRIVE® Spark Plug Sockets

#		A	B	C	Rubber Insert
<i>Standard Length (Chrome)</i>					
13/16	S9704KA	3/8	7/8	2 3/4	S9705A2
5/8	S9706KA	3/8	11/16	2 7/232	S9706KARI
3/4	S9718KA	3/8	11/16	2 13/32	S9705A2
18mm	S9711KA	3/8	17.5	67.1	S9706KARI
7/8	S6106KA	3/8	7/8	3 1/2	S6106-2R
<i>Extra Deep (Chrome)</i>					
5/8	S9720KA	3/8	—	5 31/32	S9706KARI
13/16	S9719KA	3/8	—	5 7/8	S9719-2A
<i>Flexible Extension (Chrome)</i>					
5/8	FSXK320A	—	—	5 11/32	S9076KARI
<i>Universal (Chrome)</i>					
13/16	S9704KFUA	3/8	5/8	3 23/32	S9705A2
5/8	S9706KFUA	3/8	5/8	3 23/32	S9706KARI
<i>Double Swivel Universal* (Industrial)</i>					
5/8	S9721A	3/8	—	4 13/16	S9706KARI
13/16	S9726A	3/8	—	4 13/16	S9705A2
<i>Ball Joint Swivel (Industrial)</i>					
3/8	S9710KB	3/8	—	3 25/32	S9706KARI
3/8	S9709KB	3/8	—	3 25/32	S9705A2

ASME/ANSI B107.34M-1997

* Use double swivel universals for rear spark plug removal or installations on transverse V6 engines.

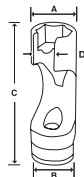


Special Application

S9723 Offset Spark Plug Socket. 5/8" offset spark plug socket for limited access situations. Remove/install the spark plug on the #3 cylinder without interference from the steering column on GM 4.3L V6 engines used in GMC Jimmys, Chevy Blazers, S10 and S15 Pickup trucks (1994 to 2004) plus Oldsmobile Bravadas (1996 to 2001). Use with 11" extension. 12-Point, Flank Drive® wrenching system. Industrial black finish. 1 1/2" length, 1 3/4" height. 3/8" drive.

FLANK DRIVE® Flare Nut Sockets

#		A	B	C	D
3/8	FRX121	5/8	3/4	2 3/32	17/64
7/16	FRX141	23/32	3/4	2 3/32	21/64
1/2	FRX161	13/16	3/4	2 1/8	3/8
9/16	FRX181	7/8	13/16	2 15/32	25/64
5/8	FRX201	15/16	7/8	2 27/32	29/64
11/16	FRX221	1	15/16	3 7/32	1/2
3/4	FRX241	1 1/16	1	3 11/32	9/16



FLANK DRIVE® Flare Nut Sockets

mm		A	B	C	D
10	FRXM10	16.9	18.3	53.3	7.2
12	FRXM12	19.3	18.3	53.3	8.8
14	FRXM14	22.0	20.5	62.5	10.4
16	FRXM16	23.5	21.9	71.6	11.7
17	FRXM17	25.1	23.5	78.0	12.7
18	FRXM18	25.9	24.3	83.8	13.5
19	FRXM19	26.7	25.1	89.9	14.2



Special Purpose Sockets 3/8" Drive



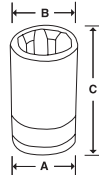
FLE180A



210AFLEY

Shallow TORX®

#		A	B	C
E8	FLE80A	15/32	11/16	1 5/32
E10	FLE100A	1/2	11/16	1 9/32
E11	FLE110A	9/16	11/16	1 9/32
E12	FLE120A	9/16	11/16	1 9/32
E14	FLE140A	5/8	11/16	1 9/32
E16	FLE160A	3/4	11/16	1 1/4
E18	FLE180A	13/16	25/32	1 5/16

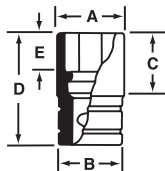


213AFLEY TORX® Set. Includes 1/4" drive TLE40A thru TLE100A (pg. 102), 3/8" drive FLE110A thru FLE140A and 1/2" drive SLE160 thru SLE240 (pg. 146) (13 pcs) (E4 thru E24).

210AFLEY TORX® Set. Includes 1/4" drive TLE40A thru TLE80A (pg. 102), plus 3/8" drive FLE100A thru FLE180A (10 pcs) (E4 thru E18).

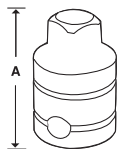


F318



Double Square

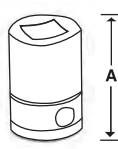
#		A	B	C	D	E
1/4	F308	1/2	21/32	3/8	27/32	7/32
5/16	F310	9/16	21/32	3/8	27/32	1/4
3/8	F312	21/32	11/16	15/32	15/16	9/32
7/16	F314	25/32	11/16	17/32	1	5/16
1/2	F316	7/8	25/32	17/32	1	5/16
9/16	F318	1	29/32	19/32	1 1/8	7/16
5/8	F320	1 1/16	31/32	19/32	1 1/8	7/16



PPM411A



PP411A



Pipe Plug

#		A		A
3/16	PPM406A	1 1/8	—	1
1/4	PPM408A	1 1/8	PP408A	1
9/32	PPM409A	1 1/8	PP409A	1
5/16	PPM410A	1 1/8	PP410A	1
11/32	PPM411A	1 1/8	PP411A	1
3/8	PPM412A	1 1/8	PP412A	1

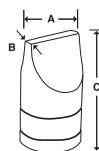
211PPPMY Internal/External Set. PPM406 thru PPM412 External Sockets plus PP408 thru PP412 Internal Sockets (11 pcs) (3/16" to 3/8").

Drag Link

	A	B	C
GF22	11/16	7/64	1 1/4



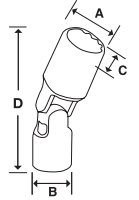
GF22



Applications include use on the engine oil fill cap on Kawasaki UN1500, UN1600 and UN2000 motorcycles.



FSE120



Universal TORX®

#		A	B	C	D
E8	FSE80	3/8	11/16	9/32	1 5/8
E10	FSE100	15/32	11/16	5/16	1 11/16
E12	FSE120	9/16	11/16	11/32	1 29/32
E14	FSE140	5/8	11/16	13/32	1 7/8
E16	FSE160	23/32	3/4	15/32	2 1/16



FLEP180



FLEPL100



TORX® Plus

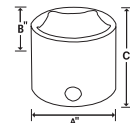
#		A	B	C
EP18	FLEP180	.76 (19.3)	.80 (20.3)	1.31 (33.3)

Use to remove seat hold down nuts on 1999 and later GM full size pickup trucks. 3/8" square drive.

FLEPL100 TORX® Plus Socket (Internal). For removal and installation of low profile transmission bolts that secure the valve body to the inside of the transmission. To access the valve body, the bottom pan and filter, which are secured by six low profile TORX® Plus 10EPL bolts, need to be removed. The low profile fasteners are used on the following GM 6 speed automatic transmissions: 6L50, 6L80, 6L90 and the BMW model 6L45.



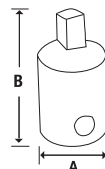
B2190



FLANK DRIVE® Pentagon Socket (5-Point)

	A	B	C
B2190	1 1/8	1/2	1 1/16

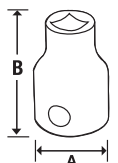
A specialty socket for servicing recessed 5-point nuts found on tamper resistant Buffalo covers used by gas, electric, and some water companies to protect shutoff gates.



PMM406A



PMP406A



Pipe Plug

mm		A	B		A	B
6	PMM406A	16.4	31.0	PMP406A	17.2	25.8
8	PMM408A	17.2	31.0	—	17.2	28.6
10	PMM410A	17.2	28.4	PMP410A	18.8	25.4

WARNING

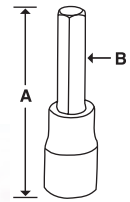
- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.



3/8" Drive Socket Drivers

Hex

Hex		A		Fits These Cap Screws		Fits These Set Screws		B	
<i>Standard Length</i>									
1/8	FA4E	GFA4E	2 1/16	—	1/4"	TMA4E2			
9/64	FA4.5E	GFA4.5E	2 1/16	#8	—	TMA4.5E2			
5/32	FA5E	GFA5E	2 1/16	#10	5/16"	FA5E2			
3/16	FA6E	GFA6E	2 1/16	1/4"	3/8"	FA6E2			
7/32	FA7E	GFA7E	2 1/16	—	7/16"	FA7E2			
1/4	FA8E	GFA8E	2 1/16	5/16"	1/2"	FA8E2			
5/16	FA10E	GFA10E	2 1/16	3/8"	5/8"	FA10E2			
3/8	FA12E	GFA12E	2 3/32	7/16" and 1/2"	3/4"	FA12E2			
<i>Extra Long</i>									
5/32	FA5LE	—	6 1/16	#10	5/16"	FA5LE2			
3/16	FA6LE	—	6 1/8	1/4"	3/8"	FA6LE2			
7/32	FA7LE	—	6 1/8	—	7/16"	FA7LE2			
1/4	FA8LE	—	6 1/8	5/16"	1/2"	FA8LE2			
5/16	FA10LE	—	6 1/16	3/8"	5/8"	FA10LE2			
3/8	FA12LE	—	6 1/16	1/4"	3/4"	FA12LE2			
<i>Stubby</i>									
7/32	FAXS7E	—	1 5/16	—	—	FAXS7E2			
1/4	FAXS8E	—	1 11/32	5/16"	7/16"	FAXS8E2			
5/16	FAXS10E	—	1 13/32	3/8"	1/2"	FAXS10E2			
3/8	FAXS12E	—	1 15/32	1/4"	5/8"	FAXS12E2			



Standard Length Hex



Stubby Hex

3/8" Drive Chrome Set:

208EFAY Standard Length Set. FA4E thru FA12E (8 pcs) (1/8" to 3/8").

206EFAL Extra Long Set. FA5LE thru FA12LE (6 pcs) (5/32" to 3/8").

3/8" Drive Industrial Set:

208EGFAY Standard Length Industrial Set. GFA4E thru GFA12E (8 pcs) (1/8" to 3/8").

Combination 1/4" and 3/8" Drive Hex Sets:

212EFTAY Combination Drive Standard Hex Set. Includes 1/4" drive TMA2E thru TMA3.5E Hex Drivers (pg. 110) plus 3/8" drive FA4E thru FA12E Hex Drivers (pg. 130) (12 pcs) (1/16" to 3/8").

208EFTAXSY Combination Drive Stubby Hex Set. Includes 1/4" drive TMAXS4E thru TMAXS6E Stubby Drivers (pg. 110) plus 3/8" drive FAXS7E thru FAXS12E Stubby Drivers (pg. 130) (8 pcs) (1/8" to 3/8").



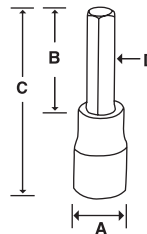
208EFTAXSY



212EFTAY

Hex

Hex		A		B		C		D	
<i>Standard Length</i>									
4	FAM4E	17.2	25.4	52.3	FAM4E2				
5	FAM5E	17.2	25.7	52.6	FAM5E2				
6	FAM6E	17.2	25.7	52.6	FAM6E2				
7	FAM7E	17.2	25.7	52.6	FAM7E2				
8	FAM8E	17.2	25.1	52.1	FAM8E2				
9	FAM9E	18.0	25.7	52.6	FAM9E2				
10	FAM10E	18.0	25.5	52.5	SAM10E2				
11	FAM11E	20.4	38.9	69.9	FAM11E2				
12	FAM12E	21.2	38.9	69.9	FAM12E2				
13	FAM13E	22.8	38.9	69.9	FAM13E2				
14	FAM14E	24.4	38.9	69.9	FAM14E2				
<i>Extra Long</i>									
4	FAML4E	17.2	127	153.9	FAML4E2				
5	FAML5E	17.2	127	153.9	FAML5E2				
6	FAML6E	17.2	127	153.9	FAML6E2				
7	FAML7E	17.2	127	153.9	FAML7E2				
8	FAML8E	17.2	127	153.9	FAML8E2				
10	FAML10E	18.0	126.5	153.4	FAML10E2				
<i>Stubby</i>									
7	FAMXS7E	17.2	7.8	34.7	FAMXS7E2				
8	FAMXS8E	17.2	8.8	35.7	FAMXS8E2				
9	FAMXS9E	18.0	9.8	36.7	FAMXS9E2				
10	FAMXS10E	18.0	10.7	37.7	FAMXS10E2				



Stubby



FAMXS10E

Standard



FAM6E

Extra Long



FAML10E



208EFTAMXSY

3/8" Drive Metric Set:

207EFAMY Metric Standard Length Set. FAM4E thru FAM10E (7 pcs) (4 to 10mm).

211EFAMY Metric Standard Length Set. FAM4E thru FAM14E (11 pcs) (4 to 14mm).

206EFAML Metric Extra Long Socket Driver Set. FAML4E thru FAML10E (6 pcs) (4 to 10mm).

1/4" and 3/8" Drive Metric Sets:

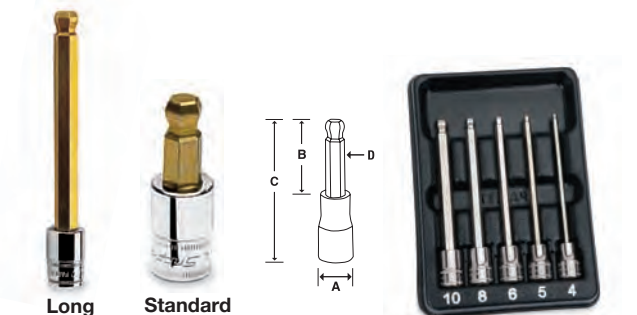
210EFTAMY Combination Metric Standard Hex Set. Includes 1/4" drive TMAM2E thru TMAM3E Standard Length Drivers (pg. 110) plus 3/8" drive FAM4E thru FAM10E Standard Length Drivers (pg. 130) (10 pcs) (2 to 10mm).

208EFTAMXSY Metric Combination Stubby Hex Set. Includes 1/4" drive TMAMXS3E thru TMAMXS6E Stubby Drivers (pg. 110) plus 3/8" drive FAMXS7E thru FAMXS10E Stubby Drivers (pg. 130) (8 pcs) (3 to 10mm).



210EFTAMY

Socket Drivers 3/8" Drive



Ball Hex

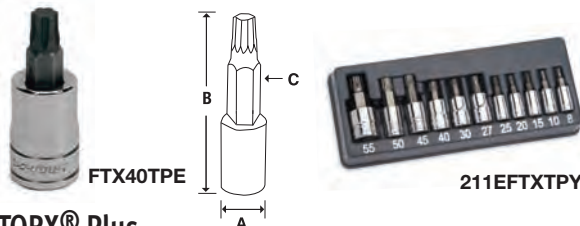
mm		A	B	C	D
<i>Standard Length</i>					
7	FABM7E	17.2	25.6	52.5	FABM7E2
8	FABM8E	17.2	25.6	52.5	FABM8E2
9	FABM9E	18.0	25.6	52.5	FABM9E2
10	FABM10E	18.0	25.6	52.5	FABM10E2
<i>Long</i>					
4	FABLM4E	17.2	101.6	129.3	FABLM4E2
5	FABLM5E	17.2	101.6	128.5	FABLM5E2
6	FABLM6E	17.2	101.6	128.5	FABLM6E2
8	FABLM8E	17.2	100.3	127.3	FABLM8E2
10	FABLM10E	18.0	101.3	128.3	FABLM10E2

3/8" Drive Metric Set:

205EFABLM Metric Long Set. FABLM4E thru FABLM10E (5 pcs) (4 to 10mm).

1/4" and 3/8" Drive Metric Set:

208EFTABMY Metric Ball Hex Combination Set. Includes 1/4" drive TMABM3E thru TMABM6E Standard Length Drivers (pg. 110) plus 3/8" drive FABM7E thru FABM10E Standard Length Drivers (pg. 131) (8 pcs) (3 to 10mm).



TORX® Plus

TORX® Plus fasteners may be found in almost all vehicles from the 1999 model year to present. Common applications include GM transmission bell housing bolts and Ford seat belt anchors. T27P size can be used to service Taurus and Sable front spring shields. Use of a standard TORX® driver on TORX® Plus fasteners may result in a rounded out fastener head or damaged driver.

#		B	C
27IP	FTX27TPE	1 3/4	FTX27TPE2
30IP	FTX30TPE	1 3/4	FTX30TPE2
40IP	FTX40TPE	1 3/4	FTX40TPE2
45IP	FTX45TPE	2 1/8	FTX45TPE2
50IP	FTX50TPE	2 1/8	FTX50TPE2
55IP	FTX55TPE	2 5/16	FTX55TPE2

211EFTXTPY Combination Drive Torx® Plus Set. Includes 1/4" drive TTX8TPE thru TTX25TPE Drivers plus 3/8" drive FTX27TPE thru FTX55TPE Drivers (11 pcs) (8IP to 55IP) in storage tray. TORX® Plus fasteners may be found in almost all vehicles from the 1999 model year to present. Common applications include GM transmission bell housing bolts and Ford seat belt anchors. Use of standard TORX® Driver on TORX® Plus fasteners may result in a rounded out fastener head or damaged driver.



#	A		B	C
T40	.260	FTXEL40E	Extra Long	7 1/2
T47	.310	FTX47E	GM Style	2 1/16
T45	.350	FTXEL45E	Extra Long	7 11/16
T40	.680 (17.2)	FTXR40TPE	Tamper Resistant (Ford)	1 3/4 (44.7)
T47	.310	GFTX500E	GM Style	2 1/16

FTXEL40E Applications include service on intake manifold bolts on Ford 5.0L engines with fuel injection, model years 1985 to 1990.

FTXEL45E Quickly and easily access intake bolts on Cummins N14 diesel engines without removing the air pump. Can also be used on older Cummins NH Big Cam 4 diesel engines. 3/8" square drive.

FTX47E For use on GM door strikers.

GFTX500E For use on GM door strikers and seat belt bolts.



Standard Length

Ball Hex

Standard Length		A	B
7/32	FAB7E	2 1/16	FAB7E2
1/4	FAB8E	2 1/16	FAB8E2
5/16	FAB10E	3 3/32	FAB10E2
3/8	FAB12E	3 3/32	FAB12E2
<i>Long</i>			
5/32	FABL5E	5 1/16	FABL5E2
3/16	FABL6E	5 1/16	FABL6E2
7/32	FABL7E	5 1/16	FABL7E2
1/4	FABL8E	5 1/16	FABL8E2
5/16	FABL10E	5 1/16	FABL10E2
3/8	FABL12E	5 1/16	FABL12E2

3/8" Drive Set:

206EFABL Long Ball Hex Set. FABL5E thru FABL12E (6 pcs) (5/32" to 3/8").

1/4" and 3/8" Drive Set:

208EFTABY Combination Standard Ball Hex Set. Includes 1/4" drive TMAB4E thru TMAB6E Ball Hex Drivers (pg. 110) plus 3/8" drive FAB7E thru FAB12E Ball Hex Drivers (pg. 131) (8 pcs) (1/8" to 3/8").



TORX® Plus / Tamper Resistant

5 lobe configuration. Two piece pinless design holds bit securely in socket while facilitating quick bit replacement. Cold formed socket delivers a strong, durable tool. Chrome plating resists corrosion and cleans easily. For sale to authorized technicians only. EU/CE-DE, ES, FR, GB. Also Japanese language.

#		A	B	C
27IPR	FTXR27TPE	.680 (17.2)	1 3/4 (44.7)	FTXR27TPE2
30IPR	FTXR30TPE	.680 (17.2)	1 3/4 (44.7)	FTXR30TPE2
40IPR	FTXR40TPE	.680 (17.2)	1 3/4 (44.7)	FTXR40TPE2
45IPR	FTXR45TPE	.680 (17.2)	2 1/32 (51.6)	FTXR45TPE2
50IPR	FTXR50TPE	.680 (17.2)	2 5/32 (54.2)	FTXR50TPE2
55IPR	FTXR55TPE	.950 (24.0)	2 11/32 (59.4)	FTXR55TPE2

211EFTXRTPY Tamper Resistant Combination Torx® Plus Set.

Includes 1/4" drive TTXR8TPE thru TTXR25TPE TORX® PLUS Drivers plus 3/8" drive FTXR27TPE thru FTXR55TPE TORX® PLUS Drivers (11 pcs) (8IPR to 55IPR). Applications for set include 2003 Ford Mustang transmissions, 2004 Ford F150 transfer case, 2004 Porsche Cayenne turbo air sensor, Delphi and Stanadyne pumps, Cummins B and C engine injection pumps and John Deere diesel injector pumps.

WARNING

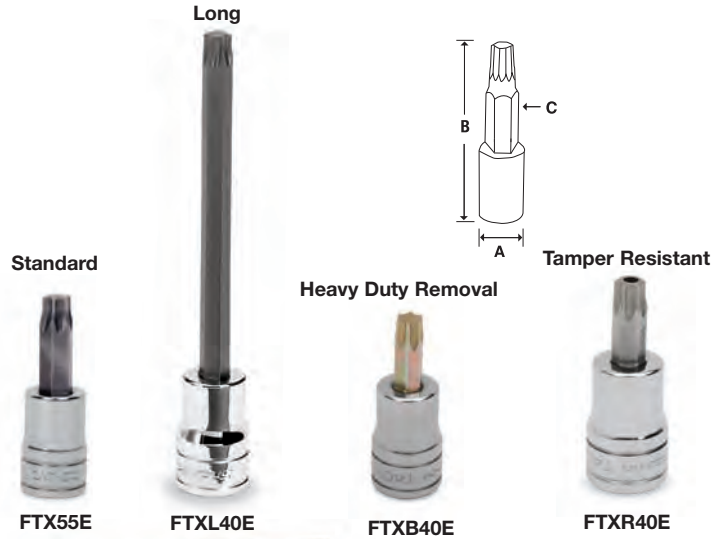
- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.

3/8" Drive Socket Drivers



Hole drilled in the center of a tamper resistant TORX® driver fits over the tamper resistant pin in the fastener recess.

#			A	B	C
Standard Length					
T27	FTX27E	GFTX27E	.195	1 3/4	FTX27E2
T30	FTX30E	GFTX30E	.216	1 3/4	FTX30E2
T40	FTX40E	GFTX40E	.260	1 3/4	FTX40E2
T45	FTX45E	GFTX45E	.306	2 1/16	FTX45E2
T50	FTX50E	GFTX50E	.346	2 1/16	FTX50E2
T55	FTX55E	GFTX55E	.440	2 3/32	FTX55E2
T60	FTX60E		.520	2 9/16	FTX60E2
Long					
T27	FTXL27E	—	.195	4 1/4	FTXL27E2
T30	FTXL30E	—	.216	4 1/4	FTXL30E2
T40	FTXL40E	—	.260	4 1/4	FTXL40E2
T45	FTXL45E	—	.306	4 1/4	FTXL45E2
T50	FTXL50E	—	.346	4 1/4	FTXL50E2
Heavy Duty Removal					
T27	FTXB27E	—	.195	1 13/16	FTXB27E2
T30	FTXB30E	—	.216	1 13/16	FTXB30E2
T40	FTXB40E	—	.260	1 13/16	FTXB40E2
T45	FTXB45E	—	.306	2 1/16	FTXB45E2
T50	FTXB50E	—	.346	2 1/16	FTXB50E2
T55	FTXB55E	—	.440	2 1/64	FTXB55E2
Tamper Resistant					
T27	FTXR27E	—	.195	1 3/4	FTXR27E2
T30	FTXR30E	—	.216	1 3/4	FTXR30E2
T40	FTXR40E	—	.260	1 3/4	FTXR40E2
T45	FTXR45E	—	.306	2 1/16	FTXR45E2
T50	FTXR50E	—	.346	2 1/16	FTXR50E2



Chrome TORX® Socket Driver Set:

207EFTXY Standard Length TORX® Set. FTX27E thru FTX55E plus FTX47E GM Style Driver (7 pcs) (T27 to T55 plus GM style T47).

Combination 1/4" and 3/8" Drive Chrome TORX® Socket Driver Sets:

212EFTXY Combination TORX® Set. Includes 1/4" drive TTX8E thru TTX25E TORX® Drivers (pg. 104) plus 3/8" drive FTX27E thru FTX55E TORX® Drivers and FTX47E GM style Driver (pg. 127) (12 pcs) (T8 to T55 plus GM style T47).

209EFTXB Heavy Duty Removal TORX® Set. Includes 1/4" drive TTXB15E thru TTXB25E TORX® Drivers (pg. 104) plus 3/8" drive FTXB27E thru FTXB55E TORX® Drivers (pg. 127) (9 pcs) (T15 to T55).

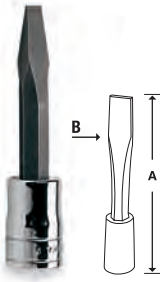
210EFTXY Long TORX® Set. Includes 1/4" drive TTX8E thru TTX25E TORX® Drivers (pg. 104) plus 3/8" drive FTX27E thru FTX55E TORX® Drivers (pg. 127) (10 pcs) (T8 to T50).

Flat Tip



F62E

#			A	B
Standard Length				
1/4 x 1/32	F23E	GF25E	3	—
5/16 x 3/64	F25E	GF31E	3	F25E2A
3/8 x 1/16	F31E	GF31E	3 7/16	F31E2A
Short				
1/4 x 1/32	F42E	—	1 13/16	F42E2
5/16 x 1/16	F52E	—	1 13/16	F52E2
3/8 x 1/16	F62E	GF62E	1 27/32	F62E2



F23E

POZIDRIV® Standard Length

#		A	B
#2	FPD22E	2 1/16	FPD22E2
#3	FPD32E	2	FPD32E2
#4	FPD41E	1 11/16	FPD41E2



FPD32E

Clutch Standard Length

#		A	B
3/8	F29E	3/8	1 3/4
5/16	F30E	19/64	1 3/4



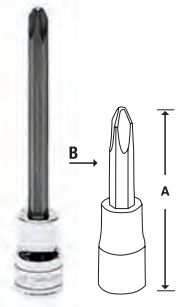
F29E

PHILLIPS®



FPS32E

#			A	B
Standard Length				
#2	FP22E	GFP22E	2 1/16	FP22E2
#3	FP32E	—	2 5/16	FP32E2
#4	FP41E	—	1 21/32	FP41E2
Short				
#3	FPS32E	—	1 29/32	SP32E2
Long				
#2	FP24E	—	4 1/32	FP24E2
#3	FP34E	—	4 1/32	FP34E2
#4	FP42E	—	2 9/16	FP42E2

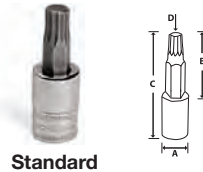


FP34E

Double Hex



Long



Standard

Double Hex socket drivers and Triple Square socket drivers cannot be interchanged between applications. Using a Triple Square tool in a Double Hex application will strip the bolt head. In general, Triple Square tools are used on European vehicles and Double Hex tools are used on Asian vehicles.

mm		A	B	C	D
Standard Length					
8	FADM8E	18.0	24.4	51.3	FADM8E2
Long					
8	FADM8LE	18.0	95	121.9	FADM8LE2

Socket Drivers 3/8" Drive

Triple Square

Double Hex socket drivers and Triple Square socket drivers cannot be interchanged between applications. Using a Triple Square tool in a Double Hex application will strip the bolt head. In general, Triple Square tools are used on European vehicles and Double Hex tools are used on Asian vehicles.

mm		A	B	C	D
<i>Standard Length</i>					
6	FTSM6E	17.2	21.6	48.5	FTSM6E2
8	FTSM8E	17.2	31.1	58.0	FTSM8E2
10	FTSM10E	18.0	40.9	67.8	FTSM10E2
<i>Long</i>					
8	FTSM8LE	17.2	57.7	84.6	FTSM8LE2
10	FTSM10LE	17.3	74.7	101.6	FTSM10LE2

FTSM10LE Applications include late 1977 to 2000 Mercedes-Benz rear axles.
TSSKIT Metric Set. Includes 3/8" drive FTSM6E, FTSM8E and FTSM10E Socket Drivers (6, 8 and 10mm) plus 1/2" drive STSM12E, STSM14E and STSM16E Socket Drivers (12, 14 and 16mm) in storage tray.

Applications:

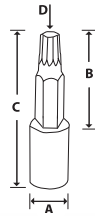
- FTSM6E (6mm, 3/8" drive) - Various applications on European vehicles.
- FTSM8E (8mm, 3/8" drive) - Remove and install head and accessory bolts on Mercedes, and remove and install axle shaft bolts on VW and Audi's.
- FTSM10E (10mm, 3/8" drive) - Used for cylinder head bolts and drive shaft bolts on Mercedes, and remove and install cylinder head bolts on VW and Audi's.
- STSM12E (12mm, 1/2" drive) - Remove and install cylinder head bolts on Mercedes, rear toe adjustment on 1999 and newer Audi A6, and axle shaft bolts on new VW's.
- STSM14E (14mm, 1/2" drive) - Used for 2003 and later VW Touareg front axle bolts, 2003 and later Porsche Cayenne front axle boots, various Audi/VW axle boots, plus Audi TT differential mount bolts and transmission drain plug.
- STSM16E (16mm, 1/2" drive) - Used for Audi TT clutch and belly pan, various Audi/VW transmission drain plugs, 2003 and later VW Touareg/Porsche Cayenne brake caliper bolts, Detroit Diesel flywheel bolts and front crank pullers on 900 and 4000 engine plus head bolts on 900 engine.



FTSM8LE



FTSM10E



TSSKIT

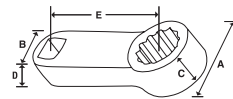
FLANK DRIVE® Torque Adaptors



205FRDH



FRDH101



FRDHM18

Standard

mm	12	A	B	C	D	E
5/16	FRDH101	.475	.750	1/4	7/16	2
3/8	FRDH121	.570	.750	5/16	7/16	2
7/16	FRDH141	.655	.750	11/32	7/16	2
1/2	FRDH161	.740	.750	11/32	7/16	2
9/16	FRDH181	.825	.750	3/8	7/16	2

Aerospace Spec. AS954E

205FRDH Chrome Set. FRDH101 thru FRDH181 (5 pcs) (5/16" to 9/16").

Standard

mm	12	A	B	C	D	E
10	FRDHM10	17.1	18.8	7.8	11.1	50.8
13	FRDHM13	21.0	18.8	7.8	11.1	50.8
15	FRDHM15	25.1	18.8	7.8	11.1	50.8
18	FRDHM18	22.4	18.8	13.3	11.1	50.8

Magnetic and Surface Drive Sockets



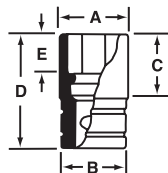
MFIM101



MFIMM15

Shallow Magnetic

mm	6	A	B	D	E
5/16	MFIM101	15/32	11/16	1 1/16	3/32
3/8	MFIM121	17/32	11/16	1 1/16	1/8
7/16	MFIM141	5/8	11/16	1 1/16	5/32
1/2	MFIM161	25/32	25/32	1 1/16	5/32
9/16	MFIM181	7/8	7/8	1 1/16	5/32



Shallow Magnetic

mm	6	A	B	D	E
10	MFIMM10A	15.1	17.2	29.1	4.7
12	MFIMM12	18.1	19.1	28.6	3.7
13	MFIMM13	19.4	19.4	28.6	3.9
15	MFIMM15	21.8	21.8	28.6	3.9



WARNING

- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.



3/8" Drive Magnetic and Surface Drive Sockets



SMFIMM13B



DFS14



DFSM10

Deep Magnetic Spring Loaded

mm	6	A	B	D	E
10	SMFIMM10B	15.1	17.2	50.8	7.1
12	SMFIMM12B	18.1	19.1	50.8	7.1
13	SMFIMM13B	19.4	19.4	50.8	7.6

Deep Surface Drive

Surface drive sockets are used in the industrial market for assembly line work. The lead in chamfer and special design of these sockets will engage with a fastener while rotating on a power nut runner. US Patent 4,512,220.

mm	6	A	B	C	D	E
7/16	DFS14	21/32	11/16	1 21/32	2 1/8	11/32
—	DFSM10	14.5	17.2	42.5	54.0	8.4

Power Socket Drivers



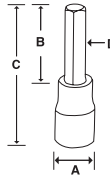
PFA8E



PFAM6E

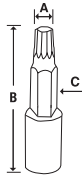
Hex

mm	Hex	C	Fits These Cap Screws	Fits These Set Screws	D
1/8	PFA4E	2 1/16	—	1/4"	TMA4E2
9/64	PFA4.5E	2 1/16	#8	—	TMA4.5E2
5/32	PFA5E	2 1/16	#10	5/16"	FA5E2
3/16	PFA6E	2 1/16	1/4"	3/8"	FA6E2
7/32	PFA7E	2 1/16	—	5/16"	FA7E2
1/4	PFA8E	2 1/16	7/16"	1/2"	FA8E2
5/16	PFA10E	2 1/16	3/8"	5/8"	FA10E2
3/8	PFA12E	2 1/16	1/4" and 1/2"	3/4"	FA12E2



Hex

mm	Hex	A	B	C	D
4	PFAM4E	17.2	25.3	52.3	FAM4E2
5	PFAM5E	17.2	25.7	52.6	FAM5E2
6	PFAM6E	17.2	25.7	52.6	FAM6E2
7	PFAM7E	17.2	25.6	52.5	FAM7E2
8	PFAM8E	17.2	25.2	52.1	FAM8E2
9	PFAM9E	18.0	25.6	52.5	FAM9E2
10	PFAM10E	18.0	25.5	52.5	SAM10E2



TORX®

#	A	Hex	B	C
T27	.195	PFTX27E	1 3/4	FTX27E2
T30	.216	PFTX30E	1 3/4	FTX30E2
T40	.260	PFTX40E	1 3/4	FTX40E2

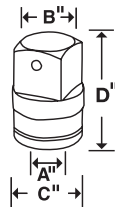


PFTX30E

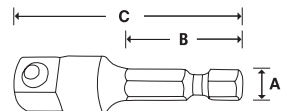
Power Accessories



PA2A



A3042



Adaptors

Hex	A	B	C	D
PA4E	1/2	3/8	15/16	1 15/32
PA2A	3/8	1/2	3/4	1 5/16

Hex To Square Adaptors

Hex	A	B	C
A3042	1/4	1	2
A3017A	7/16	1 1/4	1 3/4

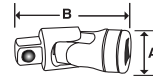
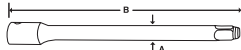
Power Accessories **3/8" Drive**



Locking Button Extensions

PF11A

	A	B
PF3	1/2	3
PF6	1/2	6
PF11A	1/2	11



Universal Joint

	A	B
PFU8A	3/4	1 31/32



PFU8A

FLANK DRIVE® Impact Sockets

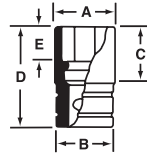
Shallow

	11	6	12	A	B	C	D	E
5/16	IMF100A	—		1/2	11/16	3/8	7/8	1/4
3/8	IMF120A	IMDF120A		9/16	11/16	7/16	7/8	3/16
7/16	IMF140A	IMDF140A		21/32	3/4	7/16	15/16	9/32
1/2	IMF160	IMDF160		3/4	3/4	7/16	15/16	9/32
9/16	IMF180	IMDF180		13/16	13/16	7/16	15/16	9/32
5/8	IMF200	IMDF200		29/32	29/32	7/16	15/16	9/32
11/16	IMF220	IMDF220		31/32	31/32	9/16	1 1/32	3/8
3/4	IMF240	IMDF240		1 1/16	1 1/16	9/16	1 3/32	13/32
13/16	IMF260	—		1 1/8	1 1/8	11/16	1 3/16	1/2
7/8	IMF280	—		1 3/16	1 3/16	3/4	1 9/32	1/2
15/16	IMF300	—		1 9/32	1 9/32	13/16	1 5/16	17/32
1	IMF320	—		1 11/32	1 9/32	13/16	1 5/16	9/16

ASME/ANSI B107.2-1995

212IMFYA 6-Point Shallow Set. IMF100A thru IMF320 (12 pcs)
(5/16" to 1").

207IMDFY 12-Point Shallow Set. IMDF120A thru IMDF240 (7 pcs)
(3/8" to 3/4").



IMF180

IMDF180



207IMDFY



212IMFYA

Shallow (Dimensions in Parentheses apply to 12-point sockets only.)

mm	6	12	A	B	C	D	E
8	IMFM8A	IMDFM8A	12.8	17.2	11.1	23.0	6.4
9	IMFM9A	—	14.0	17.2	11.0	23.0	7.1
10	IMFM10A	IMDFM10A	15.1	17.2	11.0	23.0	7.1
11	IMFM11A	IMDFM11A	16.7	18.8	11.6	23.8	7.1
12	IMFM12	IMDFM12	18.8	18.0	11.6	23.8	7.1
13	IMFM13	IMDFM13	18.8 (19.4)	18.8 (19.4)	12.4 (10.9)	24.6 (23.8)	7.4 (7.6)
14	IMFM14	IMDFM14	20.4	20.4	13.5	27.0	9.1
15	IMFM15	IMDFM15	21.2	21.2	13.5	27.0	9.1
16	IMFM16	IMDFM16	22.7	22.7	14.1	27.8	10.4
17	IMFM17	IMDFM17	24.3	24.3	14.4	28.2	10.2
18	IMFM18	IMDFM18	25.1	25.1	14.3	29.0	10.9
19	IMFM19	IMDFM19	26.7	26.7	15.6	30.6	11.7
20	IMFM20	IMDFM20	28.3	28.3	16.5	30.9	12.2
21	IMFM21	IMDFM21	28.8 (29.1)	28.8 (29.1)	17.5	29.5 (32.1)	12.2 (12.4)
22	IMFM22	IMDFM22	29.9	29.9	18.3	32.9	13.0
23	IMFM23	—	31.5	31.5	19.3	31.5	13.2
24	IMFM24	—	32.6	32.6	21.1	33.0	14.5

214IMFMYA Metric 6-Point Shallow Set. IMFM8A thru IMFM19 plus IMFM21 and IMFM24 (14 pcs) (8 to 24mm).

207IMDFMYA Metric 12-Point Shallow Set. IMDFM10A thru IMDFM18 except IMDFM11 and IMDFM16 (7 pcs)
(10 to 18mm).

Semi Deep

	11	6	A	B	C	D	E
5/16	IMFS10A		1/2	11/16	1 5/32	1 5/8	1/4
3/8	IMFS12A		9/16	11/16	1 5/32	1 5/8	9/32
7/16	IMFS14A		21/32	3/4	1 5/32	1 5/8	11/32
1/2	IMFS16		3/4	3/4	1 5/32	1 5/8	13/32
9/16	IMFS18		13/16	13/16	1 5/32	1 5/8	13/32
5/8	IMFS20		29/32	29/32	1 5/32	1 5/8	13/32
11/16	IMFS22		31/32	31/32	1 5/32	1 5/8	7/16
3/4	IMFS24		1 1/16	1 1/16	1 5/32	1 5/8	15/32
13/16	IMFS26		1 1/8	1 1/8	1 5/32	1 5/8	1/2
7/8	IMFS28		1 3/16	1 3/16	1 5/32	1 5/8	17/32

210IMFSYA 6-Point Semi Deep Set. IMFS10A thru IMFS28 (10 pcs)
(5/16" to 7/8").



IMFS16



210IMFSYA



WARNING

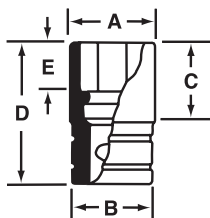
- Do not use chrome or industrial finish hand tools with impact drivers.
- Read additional safety precautions on pages 534 to 537.



3/8" Drive FLANK DRIVE® Impact Sockets



IMFMS12



Semi Deep

mm	6	A	B	C	D	E
8	IMFMS8A	12.8	17.2	29.3	41.3	6.4
9	IMFMS9A	14.0	17.2	29.3	41.3	7.1
10	IMFMS10A	15.1	17.2	29.3	41.3	9.7
11	IMFMS11A	17.2	17.2	29.3	41.3	9.7
12	IMFMS12	18.0	18.0	29.3	41.3	9.7
13	IMFMS13	19.6	19.6	29.3	41.3	10.4
14	IMFMS14	20.4	20.4	29.3	41.3	10.4
15	IMFMS15	21.2	21.2	29.3	41.3	10.4
16	IMFMS16	22.7	22.7	29.3	41.3	10.4
17	IMFMS17	24.3	24.3	29.3	41.3	11.2
18	IMFMS18	25.1	25.1	29.3	41.3	11.2
19	IMFMS19	26.7	26.7	29.3	41.3	11.7

212IMFMSYA Metric 6-Point Semi Deep Set. IMFMS8A thru IMFMS19 (12 pcs) (8 to 19mm).

Deep

mm	6	A	B	C	D	E
5/16	SIMF100A	1/2	11/16	1 1/2	2 1/8	3/16
3/8	SIMF120A	9/16	11/16	1 1/2	2 1/8	9/32
7/16	SIMF140A	21/32	3/4	1 1/2	2 1/8	5/16
1/2	SIMF160	3/4	3/4	1 1/2	2 1/8	3/8
9/16	SIMF180	13/16	13/16	1 1/2	2 3/8	7/16
5/8	SIMF200	29/32	29/32	1 1/2	2 3/8	7/16
11/16	SIMF220	31/32	31/32	1 1/2	2 5/8	1/2
3/4	SIMF240	1 1/16	1 1/16	1 1/2	2 5/8	9/16
13/16	SIMF260	1 1/8	1 1/8	2 1/16	2 3/4	9/16
7/8	SIMF280	1 3/16	1 3/16	2 1/16	2 3/4	9/16
15/16	SIMF300	1 9/32	1 9/32	2 1/32	2 3/4	9/16
1	SIMF320	1 11/32	1 11/32	2 3/16	2 3/4	5/8

ASME/ANSI B107.2-1195

207SIMFYA 6-Point Shallow Set. SIMF120A thru SIMF240 (7 pcs) (3/8" to 3/4").

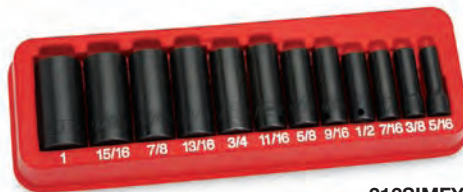
212SIMFYA 6-Point Deep Set. SIMF100A thru SIMF320 (12 pcs) (5/16" to 1").



SIMF260



207SIMFYA



212SIMFYA

Deep

mm	6	12	A	B	C	D	E
8	SIMFM8A	SIMDFM8A	12.8	17.2	38.1	54.0	6.4
9	SIMFM9A	SIMDFM9A	14.0	17.2	38.1	54.0	7.1
10	SIMFM10A	SIMDFM10A	15.1	17.2	38.1	54.0	9.7
11	SIMFM11A	SIMDFM11A	17.2	17.2	38.1	54.0	9.7
12	SIMFM12	SIMDFM12	18.0	18.0	38.1	54.0	9.7
13	SIMFM13	SIMDFM13	19.6	19.6	38.1	54.0	10.4
14	SIMFM14	SIMDFM14	20.4	20.4	42.7	60.3	10.4
15	SIMFM15	SIMDFM15	21.2	21.2	42.7	60.3	10.4
16	SIMFM16	SIMDFM16	22.7	22.7	42.7	60.3	10.4
17	SIMFM17	SIMDFM17	24.3	24.3	47.0	66.7	11.2
18	SIMFM18	SIMDFM18	25.1	25.1	47.0	66.7	11.2
19	SIMFM19	SIMDFM19	26.7	26.7	47.0	66.7	14.2
20	SIMFM20	—	28.3	28.3	47.0	66.7	12.2
21	SIMFM21	SIMDFM21	28.9	28.9	47.0	66.7	12.4
22	SIMFM22	—	29.9	29.9	51.6	73.0	13.0
23	SIMFM23	—	31.5	31.5	51.6	73.0	13.0
24	SIMFM24	SIMDFM24	33.0	33.0	58.2	73.0	14.7

214SIMFMYA Metric 6-Point Deep Set. SIMFM8A thru SIMFM19 plus SIMFM21 and SIMFM24 (14 pcs) (8 to 24mm).

214SIMDFMYA Metric 12-Point Deep Set. SIMDFM8A thru SIMDFM19 plus SIMDFM21 and SIMDFM24 (14 pcs) (8 to 24mm).



SIMFM20



SIMDFM14





214SIMFMYA



214SIMDFMYA

FLANK DRIVE® Impact Swivel Sockets 3/8" Drive

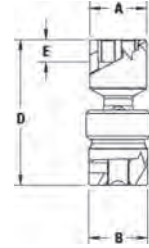
Shallow

		A	B	D	E
3/8	IPF12B	9/16	7/8	1 31/32	1/4
7/16	IPF14B	21/32	7/8	2 1/16	9/32
1/2	IPF16B	3/4	7/8	2 1/8	5/16
9/16	IPF18B	13/16	7/8	2 3/16	5/16
5/8	IPF20B	7/8	7/8	2 1/4	11/32
11/16	IPF22B	31/32	29/32	2 17/32	13/32
3/4	IPF24B	1 1/16	29/32	2 19/32	7/16

207IPFY 6-Point Shallow Set. IPF12B thru IPF24B (7 pcs) (3/8" to 3/4").



IPF16B






IPDFM12



IPFM10B



Shallow

			A	B	D	E
8	IPFM8B	—	13.2	22.2	49.8	6.4
9	IPFM9B	—	14.0	22.2	49.8	6.4
10	IPFM10B	—	15.4	22.2	50.8	7.1
11	IPFM11B	—	16.7	22.2	52.1	7.1
12	IPFM12B	IPDFM12	18.1	22.2	53.1	7.1
13	IPFM13B	—	18.9	22.2	54.1	7.9
14	IPFM14B	—	20.5	22.2	55.4	7.9
15	IPFM15B	—	21.2	22.2	56.4	7.9
16	IPFM16B	—	22.6	22.2	57.4	8.6
17	IPFM17B	—	23.4	23.0	62.2	8.6
18	IPFM18B	—	25.1	23.0	64.0	9.7
19	IPFM19B	—	26.4	23.0	65.0	10.4
22	IPFM22B	—	29.9	23.0	68.1	13.0

211IPFMY Metric 6-Point Shallow Set. IPFM9B thru IPFM19B (11 pcs) (9 to 19mm).

207IPFMY Metric 6-Point Shallow Set. IPFM10B thru IPFM18B (except IPFM11B and IPFM16B) (7 pcs) (10 to 18mm).

Semi Deep

		A	B	D	E
8	IPFSM8	12.8	22.2	62.5	6.4
9	IPFSM9	14.0	22.2	63.0	7.1
10	IPFSM10	15.1	22.2	64.1	9.7
11	IPFSM11	17.2	22.2	65.6	9.7
12	IPFSM12	18.0	23.0	70.9	9.7
13	IPFSM13	19.6	23.0	71.9	10.4
14	IPFSM14	20.4	23.0	72.9	10.4
15	IPFSM15	22.0	23.0	74.4	10.4
16	IPFSM16	22.7	23.0	74.9	10.4
17	IPFSM17	24.3	23.0	76.0	11.2
18	IPFSM18	25.1	23.0	77.5	11.2
19	IPFSM19	26.7	23.0	79.0	14.2
22	IPFSM22	29.9	23.0	82.1	14.2
24	IPFSM24	32.1	23.0	84.8	14.7

207IPFSMY Metric 6-Point Semi Deep Set. IPFSM10 thru IPFSM18 (except IPFSM11 and IPFSM16) (7 pcs) (10 to 18mm).



IPFSM10



WARNING

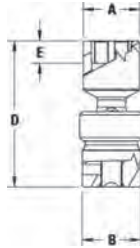
• Read additional safety precautions on pages 534 to 537.



3/8" Drive FLANK DRIVE® Impact Swivel Sockets



IPLF20A



Deep

II	6	A	B	D	E
3/8	IPLF12A	9/16	7/8	2 15/16	1/4
7/16	IPLF14A	21/32	7/8	2 3/4	9/32
1/2	IPLF16A	3/4	7/8	2 3/4	5/16
9/16	IPLF18A	13/16	7/8	3 3/16	5/16
5/8	IPLF20A	7/8	7/8	3 1/4	11/32



IPLFM10A

Deep

mm	6	A	B	D	E
8	IPLFM8A	15.8	24.9	70.1	9.1
10	IPLFM10A	15.8	24.9	70.1	9.1
12	IPLFM12A	16.6	24.9	70.1	9.7
13	IPLFM13	18.8	22.2	79.5	10.4
14	IPLFM14	20.4	22.2	81.0	10.4
15	IPLFM15	21.2	22.2	82.6	10.4
17	IPLFM17	23.4	23.0	88.3	10.2
18	IPLFM18	25.1	23.0	90.1	10.7
19	IPLFM19	26.7	23.0	91.2	14.2

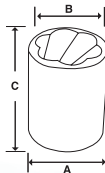
209IPLFMY Metric 6-Point Impact Swivel Deep Set. IPLFM8 thru IPLFM19 (9 pcs) (8 to 19mm).

Impact Sockets / Special Purpose

Quickly and easily remove damaged or rounded nuts and bolts. Simply place socket on fastener and turn with 3/8" drive handle or impact gun. Grip on fastener tightens as more torque is applied. No hammering required to install socket over fastener. Use on fasteners up to 3/4" (19mm). Applications include oil pan drain plugs, exhaust manifold nuts, studs, pipe nipples and corroded marine fasteners.



TFSY241A



209TFSMYA

Shallow Twist

II	mm	6	A	B	C
3/8		TFSY121A	11/16 (17.5)	9/16 (14.3)	1 1/4 (31.8)
7/16 (11)		TFSY141A	11/16 (17.5)	21/32 (16.7)	1 1/4 (31.8)
1/2		TFSY161A	3/4 (19.1)	3/4 (19.1)	1 1/4 (31.8)
9/16		TFSY181A	13/16 (20.6)	13/16 (20.6)	1 1/4 (31.8)
5/8 (16)		TFSY201A	29/32 (23.0)	29/32 (23.0)	1 1/4 (31.8)
11/16		TFSY221A	31/32 (24.6)	31/32 (24.6)	1 3/8 (35.0)
3/4 (19)		TFSY241A	1 1/16 (27.0)	1 1/16 (27.0)	1 3/8 (35.0)
10		TFSY10A	11/16 (17.5)	19/32 (15.1)	1 1/4 (31.8)
12		TFSY12A	11/16 (17.5)	11/16 (17.5)	1 1/4 (31.8)
13		TFSY13A	3/4 (19.1)	3/4 (19.1)	1 1/4 (31.8)
14		TFSY14A	13/16 (20.6)	13/16 (20.6)	1 1/4 (31.8)
15		TFSY15A	13/16 (20.6)	27/32 (21.4)	1 1/4 (31.8)
17		TFSY17A	31/32 (24.6)	31/32 (24.6)	1 3/8 (35.0)

209TFSMYA Metric Twist Shallow Set. TFSY10A thru TFSY17A plus TFSY141A, TFSY201A and TFSY241A (9 pcs) (10 to 19mm) in storage tray.

213TFSYA SAE/Metric Twist Shallow Set. Includes all TFSY Series shallow sockets (13 pcs) (3/8" to 3/4", 10 to 19mm) in storage tray.

Deep Twist

II	mm	6	A	B	C
3/8		TSFSY121A	11/16 (17.5)	9/16 (14.3)	2 1/8 (54.0)
7/16 (11)		TSFSY141A	11/16 (17.5)	21/32 (16.7)	2 1/8 (54.0)
1/2		TSFSY161A	3/4 (19.1)	3/4 (19.1)	2 1/8 (54.0)
9/16		TSFSY181A	13/16 (20.6)	13/16 (20.6)	2 3/8 (60.3)
5/8 (16)		TSFSY201A	29/32 (23.0)	29/32 (23.0)	2 3/8 (60.3)
11/16		TSFSY221A	31/32 (24.6)	31/32 (24.6)	2 5/8 (66.7)
3/4 (19)		TSFSY241A	1 1/16 (27.0)	1 1/16 (27.0)	2 5/8 (66.7)
10		TSFSY10A	11/16 (17.5)	19/32 (15.1)	2 1/8 (54.0)
12		TSFSY12A	11/16 (17.5)	11/16 (17.5)	2 1/8 (54.0)
13		TSFSY13A	3/4 (19.1)	3/4 (19.1)	2 1/8 (54.0)
14		TSFSY14A	13/16 (20.6)	13/16 (20.6)	2 3/8 (60.3)
15		TSFSY15A	13/16 (20.6)	27/32 (21.4)	2 3/8 (60.3)
17		TSFSY17A	31/32 (24.6)	31/32 (24.6)	2 5/8 (66.7)

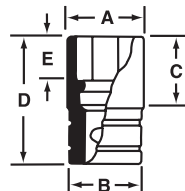
213TSFSYA SAE/Metric Twist Deep Set. Includes all TSFSY Series deep sockets (13 pcs) (3/8" to 3/4", 10 to 19mm) in storage tray.



TSFSY241A



213TSFSYA



IMFLE140A

Shallow TORX®

#	6	A	B	C	D	E
E14	IMFLE140A	11/16	11/16	11/16	1 5/32	13/32

Impact Accessories **3/8" Drive**

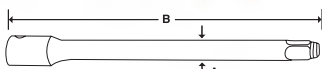
Extensions

Snap Ring Retention Device



IMX61

	A	B
IMX11	1/2	1 3/4
IMX31	1/2	3
IMX61	1/2	6
IMX111	1/2	11



204IMXA Impact Extension Set.

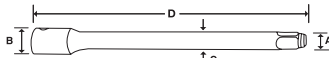
IMX11 thru IMX111 (4 pcs) (1 3/4" to 11") in a storage tray.



IMSFXL24

Locking Extension Adaptors

Quick release locking sleeve at the 3/8" drive



	A	B	C	D
IMSFXL18	3/8 (locking)	1/2	0.645	18 (457.2)
IMSFXL24	3/8 (locking)	1/2	0.645	24 (609.6)
IMSFXL33	3/8 (locking)	1/2	0.645	33 (838.2)

Impact Driver Sets

208EPIT Set. 8 pcs Includes:

- PIT120 Impact Driver
- F42E 1/4" Flat Tip Driver
- F52E 5/16" Flat Tip Driver
- F62E 3/8" Flat Tip Driver
- FP22E #2 PHILLIPS® Driver
- FP32E #3 PHILLIPS® Driver
- FP42E #4 PHILLIPS® Driver
- FPD22E #2 POZIDRIV® Driver
- PB108A Storage Case



208EPIT

PIT120 Impact Driver

Delivers cam action impact when struck with a hammer for loosening or tightening fasteners. Industrial finish.



PIT120

Locking Extensions

Quick release locking sleeve provides a secure connection plus easy socket removal. Knurled release collar for easy one hand operation, even with slippery hands.



IMXL61



	A	B
IMXL31	1/2	3
IMXL61	1/2	6
IMXL111	1/2	11

Extension Adaptor

Snap Ring Retention



	A	B	C	D
IMXA42	3/8	1/2	1/2	4



IMXA42

Universal Joints

	A	B
IPF80A*	1	2 1/8
IPF800A*	1	2 1/8



IPF800A



- Lock Button Retention Device.
- * Friction Ball Retention Device.

PIT2230E Impact Driver Set

Includes PIT120 Impact Driver plus all sockets, screwdrivers and replacement bits (36 pcs) conveniently displayed in a storage tray that fits in the KRA142 Metal Box.



PIT2230E

General Service Sets

BLPPTSM10

BLPPTA3438

BLPPTTEXT3

BLPPTSS3822

BPRFPT10

Pass Thru Socket Set

Size	Stock No.	External Hex, inches	Length, inches
3/8"	BLPPTS38	3/4	1 7/16
7/16"	BLPPTS716	3/4	1 7/16
1/2"	BLPPTS12	3/4	1 7/16
9/16"	BLPPTS916	3/4	1 7/16
5/8"	BLPPTS58	3/4	1 7/16
11/16"	BLPPTS1116	3/4	1 7/16
3/4"	BLPPTS34	3/4	1 7/16
8mm	BLPPTSM8	3/4	1 7/16
9mm	BLPPTSM9	3/4	1 7/16
10mm	BLPPTSM10	3/4	1 7/16
11mm	BLPPTSM11	3/4	1 7/16
12mm	BLPPTSM12	3/4	1 7/16
13mm	BLPPTSM13	3/4	1 7/16
14mm	BLPPTSM14	3/4	1 7/16
15mm	BLPPTSM15	3/4	1 7/16
16mm	BLPPTSM16	3/4	1 7/16
17mm	BLPPTSM17	3/4	1 7/16
18mm	BLPPTSM18	3/4	1 7/16
19mm	BLPPTSM19	3/4	1 7/16

BLPPTSS3822 Pass Thru Socket Set. Includes BLPPTS38 thru BLPPTS34 (3/8" to 3/4") sockets, BLPPTSM8 thru BLPPTSM19 (8 to 19mm) metric sockets, BLPPTA3438 square drive adaptor, BLPPTTEXT3 extension and BPRFPT10 Ratchet (22 pcs) in storage case.

BPRFPT10 Ratchet. Ratchet features a flex head design that allows for seven different locking positions. 3/4" hex drive. 10" long.

BLPPTTEXT3 Extension. 3" extension.

BLPPTA3438 Adaptor. 3/8" square drive adaptor. 1 1/4" long.



General Service Sets

BLPGSSCT71 General Service Set.

- Set Components (3/8" Drive)
- 9 Fractional Combination Wrenches (1/4" to 3/4")
 - 10 Metric Combination Wrenches (1/4" to 3/4")
 - 12 Fractional (5/16" to 1") and 15 Metric (10 to 24mm) 6-pt. Standard Sockets
 - 2 Spark Plug Sockets (5/8", 13/16")
 - 1 Quick Release Ratchet
 - 1 Spinner Handle
 - 3 Extensions (3", 6" and 10")
 - 1 Bit Holder (3/8" drive)
 - 4 Hex Bits (1/8", 5/32", 7/32" and 1/4")
 - 3 Flat Tip Bits (5/32, 3/16 and 1/4")
 - 4 Phillips® Tip Bits (#0, #1, #2 and #3)
 - 2 Square Tip Bits (#1 and #2)
 - 1 Diagonal Cutting Pliers (7")
 - 1 Long Nose Pliers (6")
 - 1 Groove Joint Pullers (10")
 - 1 Adjustable Wrench (8")



BLPGSSCT71



WARNING

- Do not hold swivel joint tools during use.
- Read additional safety precautions on pages 534 to 537.



3/8" Drive General Service Sets



BLPGSSC100 General Service Set

Set Components (1/4" Drive)

- 10 Fractional (3/16" to 9/16") and 13 Metric (4 to 14mm) Standard Sockets
- 6 Ratchet/Socket Accessories
- 1 Ratchet

Set Components (3/8" Drive)

- 13 Fractional (1/4" to 1") and 19 Metric (6 to 24mm)
 - 11 External Torx® Sockets (E4 to E20)
 - 2 Spark Plug Sockets (5/8", 13/16")
 - 5 Ratchet/Socket Accessories
 - 1 Ratchet
- Set Components (Combination Wrenches)
- 9 Fractional Combination Wrenches (1/4" to 3/4")
 - 10 Metric Combination Wrenches (10 to 19mm)



BLPGSSC100



BLPGSSC155



BLPGSS3885

BLPGSSC155 General Service Set

Set Components (1/4" Drive)

- 10 Fractional (3/16" to 9/16") and 13 Metric (4 to 14mm) Standard Sockets
- 10 Fractional (3/16" to 9/16") and 11 Metric (4 to 14mm) Deep Sockets
- 20 Assorted 1/4" hex bits with Bit Holder
- 5 Ratchet/Socket Accessories
- 1 Quick Release Ratchet

Set Components (3/8" Drive)

- 13 Fractional (1/4" to 1") and 19 Metric (6 to 24mm) Standard Sockets
- 11 Fractional (3/8" to 1") and 15 Metric (10 to 24mm) Deep Sockets
- 11 External Torx® Sockets (E4 to E20)
- 2 Spark Plug Sockets (5/8", 13/16")
- 3 Metric Hex Socket Drivers (7, 8, 10mm)
- 4 Tamper Resistant Torx® Socket Drivers (T40, T45, T50, T55)
- 5 Ratchet/Socket Accessories
- 1 Quick Release Ratchet

BLPGSS3885 General Service Set

Set Components (3/8" Drive)

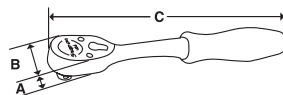
- 13 Fractional (1/4" to 1") and 14 Metric (6 to 19mm) Standard Sockets
- 13 Fractional (1/4" to 1") and 14 Metric (6 to 19mm) Deep Sockets
- 11 External Torx® Sockets (E4 to E20)
- 2 Phillips® Socket Drivers (#3 and #4)
- 2 POZIDRIV® Socket Drivers (#3 and #4)
- 8 Tamper Resistant Torx® Socket Drivers (T10 to T45)
- 2 Spark Plug Sockets (5/8", 13/16")
- 6 Ratchet/Socket Accessories
- 1 Ratchet

Ratchets, Handles and Accessories



Ratchets

Features quick release button for rapid socket/accessory changes, even with greasy or oily hands. Contoured handle for comfort and control. Chrome finish for easy clean up. All ratchets in series meet or exceed ANSI B107-10M-1996 specifications.



	A	B	C
BPRFR938 Quick Release	9/16	1 9/32	7 3/4

BPR703 Quick Release Ratchet Set. 1/4" drive BPRTR936, 3/8" drive BPRFR938 and 1/2" drive BPRSR940 Ratchets (3 pcs) in storage tray. Repair kit is RKRBPFR938.



BPRFR938



BPR703



BLPBB3810



BLPCGHD388



FXLBP6



203FXLBP



Handled Drivers

Stock No.	Description	Length, inches
BLPBB3810	Breaker Bar	9 31/32
BLPCGHD388	Spinner Handle	8 5/8



Locking Extensions



	Length, inches
FXLBP3	3
FXLBP6	6
FXLBP10	10

203FXLBP Locking Extension Set. FXLBP3, FXLBP6 and FXLBP10 (3 pcs) (3", 6" and 10") in a storage tray.

Ratchets, Handles and Accessories **3/8" Drive**

Extra Long Locking Extensions

Stock No.	Square Drive, inches	Length, inches
BLPEXTL3812	3/8	12
BLPEXTL3818	3/8	18
BLPEXTL3824	3/8	24

BLPLLEXT203 Extra Long Locking Extension Set. Smooth, durable chrome finish. Made from tough 6130 steel. Secure socket retention. Lifetime warranty on individual extensions. Do not use with power or impact tools.



BLPEXTL3812



BLPLLEXT203



Knurled Extensions

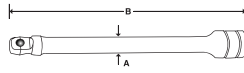
Stock No.	Length, inches
BLPEXTK383	2 31/32
BLPEXTK386	5 29/32
BLPEXTK3810	9 29/32



BLPEXTK386



YA525A



Extension / Locking (Set Screw)

Stock No.	Finish	A	B
YA525A	Chrome	3/4	2 1/8

YA525A Set Screw Locking Extension. Allows easy and secure stacking of tools. Securely connects breaker bar, extensions and ratchets to socket and socket drivers to eliminate socket coming loose when working overhead. Simply slide back sleeve to remove socket. Do not use with power or impact tools.



Universal Joint

Stock No.	Length, inches
BLPUJ38	2 1/32



BLPUJ38



Standard, mm



BLPSM389 BLPSM3815 BLPSM3822

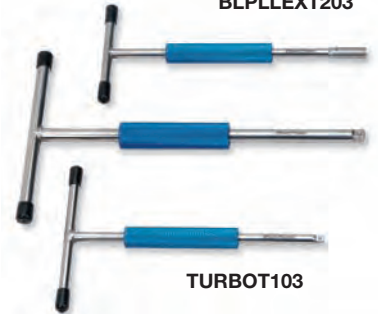
Size, mm	Stock No.	Length, mm
6	BLPSM386	25.5
7	BLPSM387	25.5
8	BLPSM388	25.5
9	BLPSM389	25.5
10	BLPSM3810	25.5
11	BLPSM3811	25.5
12	BLPSM3812	25.5
13	BLPSM3813	25.5
14	BLPSM3814	27
15	BLPSM3815	27
16	BLPSM3816	27
17	BLPSM3817	27
18	BLPSM3818	27
19	BLPSM3819	29
20	BLPSM3820	29
21	BLPSM3821	29
22	BLPSM3822	31
23	BLPSM3823	31
24	BLPSM3824	31



Turbo T-Handle Speed Drivers

Stock No.	Description	Handle Type
F11TURBO	3/8" square drive	Turbo T-Handle

TURBOT103 Turbo T-Handle Set. T9TURBO (1/4" drive), TH10TURBO (1/4" hex) and F11TURBO (3/8" drive) (3 pcs) in storage tray



TURBOT103



FSD3KT



Spinning Adaptors

FSD1 Spinner Adaptor. 3/8" male to 3/8" female.

FSD14 Spinner Adaptor. 3/8" male to 1/4" female.

FSD38 Spinner Adaptor. 1/4" male to 3/8" female.

FSD3KT Spinner Adaptor Set. Includes FSD14, FSD38 and FSD1.

Sockets



Standard, inches



BLPS3838

BLPS3878

Size, inches	Stock No.	Length, inches
1/4	BLPS3814	1
5/16	BLPS3816	1
3/8	BLPS3838	1
7/16	BLPS38716	1
1/2	BLPS3812	1
9/16	BLPS38916	1 1/16
5/8	BLPS3858	1 1/16
11/16	BLPS381116	1 1/16
3/4	BLPS3834	1 5/32
13/16	BLPS381316	1 5/32
7/8	BLPS3878	1 7/32
15/16	BLPS381516	1 7/32
1	BLPS381	1 7/32



WARNING

- Do not use chrome or industrial finish hand tools with power drivers.
- Read additional safety precautions on pages 534 to 537.




3/8" Drive Sockets



Deep, inches


BLPL3838 BLPL3834

Size, inches		Length, inches
1/4	BLPL3814	2 17/32
5/16	BLPL38516	2 17/32
3/8	BLPL3838	2 17/32
7/16	BLPL38716	2 17/32
1/2	BLPL3812	2 17/32
9/16	BLPL38916	2 17/32
5/8	BLPL3858	2 17/32
11/16	BLPL381116	2 17/32
3/4	BLPL3834	2 17/32
13/16	BLPL381316	2 17/32
7/8	BLPL3878	2 17/32
15/16	BLPL381516	2 17/32
1	BLPL381	2 17/32



TORX®


BLPTE3810 BLPTE3818

Size		Length, inches
E4	BLPTE384	1 7/32
E5	BLPTE385	1 7/32
E6	BLPTE386	1 7/32
E7	BLPTE387	1 7/32
E8	BLPTE388	1 7/32
E10	BLPTE3810	1 7/32
E12	BLPTE3812	1 7/32
E14	BLPTE3814	1 7/32
E16	BLPTE3816	1 7/32
E18	BLPTE3818	1 7/32
E20	BLPTE3820	1 7/32



Deep, mm

BLPLM3810 BLPLM3816 BLPLM3822

Size, mm		Length, mm
6	BLPLM386	64
7	BLPLM387	64
8	BLPLM388	64
9	BLPLM389	64
10	BLPLM3810	64
11	BLPLM3811	64
12	BLPLM3812	64
13	BLPLM3813	64
14	BLPLM3814	64
15	BLPLM3815	64
16	BLPLM3816	64
17	BLPLM3817	64
18	BLPLM3818	64
19	BLPLM3819	64
20	BLPLM3820	64
21	BLPLM3821	64
22	BLPLM3822	64
23	BLPLM3823	64
24	BLPLM3824	64



BLSPSP3858 BLSPSP381316

Spark Plug Sockets, inches


Size, inches		Length, inches
5/8	BLSPSP3858	2 9/16
13/16	BLSPSP381316	2 1/4

Socket Drivers



Hex, mm


BLPH3810

Size, mm		Length, mm
7	BLPH387	47
8	BLPH388	50.5
10	BLPH3810	50.5



PHILLIPS®


BLPP383

Size		Length, inches
#3	BLPP383	1 27/32
#4	BLPP384	1 27/32



POZIDRIV®


BLPPD383

Size		Length, inches
#3	BLPPD383	1 27/32
#4	BLPPD384	1 27/32



TORX®/ Tamper Resistant

BLPT3820TP BLPT3845TP

Size		Length, inches
T10	BLPT3810TP	1 27/32
T15	BLPT3815TP	1 27/32
T20	BLPT3820TP	1 27/32
T25	BLPT3825TP	1 27/32
T27	BLPT3827TP	1 27/32
T30	BLPT3830TP	1 27/32
T40	BLPT3840TP	2
T45	BLPT3845TP	2
T50	BLPT3850TP	2
T55	BLPT3855TP	2