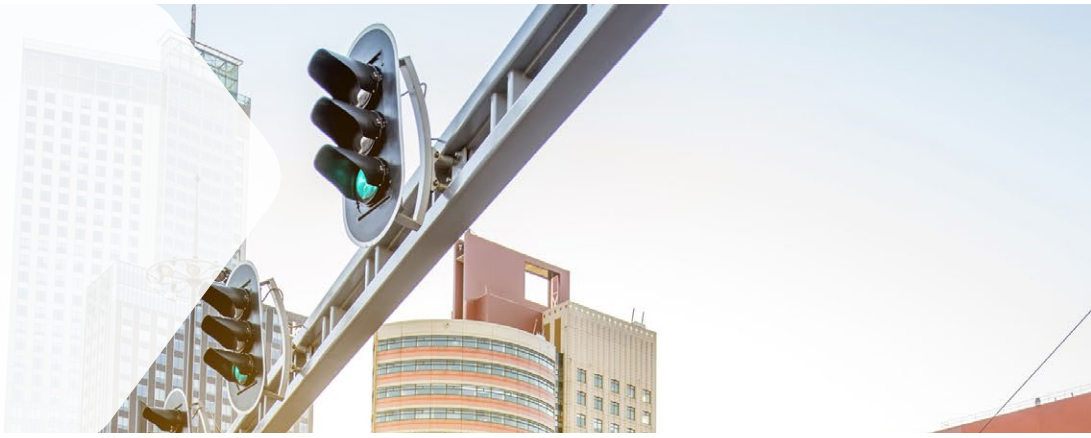
SWARCO

McCAIN SIGNAL FRAMEWORK

SIDE POLE
POST TOP
OVERHEAD
MAST ARM
PEDESTRIAN
PIPE FITTINGS
POLE HARDWARE
SPECIAL / CUSTOM



The McCain Signal Framework collection covers the gamut of your signal needs including; side-of-pole, post top, and overhead mountings, mast arm mounts, post top and side-of-pole pedestrian framework, pipe fittings, hardware, and special/custom mounting options. All of the SWARCO McCain, Inc. framework options are built to our high-quality standards and manufactured from high-grade materials providing you with a dependable and rugged product.

KEY FEATURES AND BENEFITS

- Compatible with standard signals, programmable signals, and pedestrian housings
- Standard 1½-11½ NPT, schedule 40
- Complete line of fittings, pole mounts, pipe and nipples, terminal compartments, and more
- Wide variety of mounting types and configurations

PRODUCT DESCRIPTION

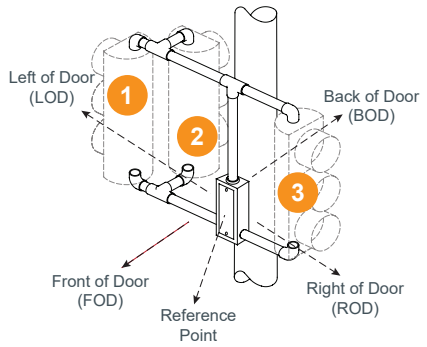
The SWARCO McCain, Inc. Signal Framework collection is a long-lasting compliment to the complete line of signal heads and pedestrian signals[1].

8” and 12” signal heads can be combined in the same mounts and are available in many standard configurations. Commonly featuring one to four signal heads per mount, framework is available for top-of-pole, side-of-pole, span wire, or mast arm, and with or without terminal compartments.

Based on a 1½-11½ NPT, schedule 40, McCain Signal Framework is industry-standard compatible. Pre-assembled frames come fully wired with 14 AWG wire for your convenience. All framework is powder coated in standard or custom colors.

FRAMEWORK NOMENCLATURE

Reference point for all framework designation is the door of the terminal compartment.



Designation for unsymmetrical framework shown above:
Head No. 1: Offset LOD, outboard
Head No. 2: Offset LOD, inboard BOD
Head No. 3: Offset ROD

STANDARD FEATURES

- 1½-11½ NPT
- 14 AWG THHN stranded wire

GENERAL SPECIFICATIONS

Dimensions:	Varies based on selected framework
Wall Thickness:	Schedule 40
Thread[2]:	1½-11½ NPT
Material[3]:	Aluminum, bronze, or steel
Finishes:	Powder coated
Colors:	Federal yellow, signal green, black, or custom colors
Mounting:	Side of pole, top of pole, mast arm
Environment:	Operating temperature: -37° C to +74° C Humidity: 0 to 95% (non-condensing)
Shipping Weight:	Varies based on selected framework

OPTIONS

- Clamshell mount for pedestrian housings
- Other configurations and parts meeting specification of many state Departments of Transportation are available.
- Contact your SWARCO McCain, Inc. representative for further information.

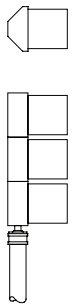
DETAILS TO INCLUDE WHEN ORDERING

- Material type for frame elements[4]
- Signal face size[5] and manufacturer of signal module (LED)
- Designation (e.g., TV-2-T) indicating framework type
- Orientation of signal head mountings[6]
- Nipple lengths
- Color

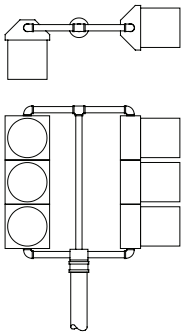
[1]See separate product brochure
[2]1½ foot diameter, 11½ threads per inch
[3]Specific materials may not be available for all framework items
[4]Steel, aluminum, or bronze (pole adapter, slip fitting, terminal compartment, pole plate, etc.)
[5]8", 12", or combo
[6]Left or right of door

TOP-OF-POLE MOUNTING

Without Terminal Compartments

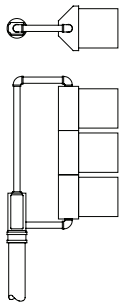


Caltrans: TV-1
ADOT: TYPE III

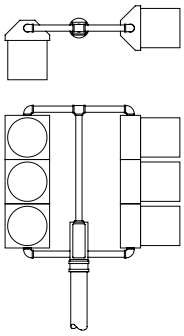


Caltrans: TV-2

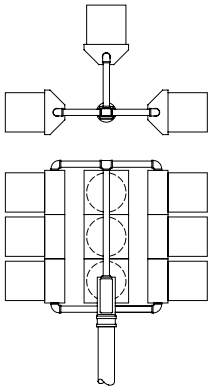
With Terminal Compartments



Caltrans: TV-1-T
ADOT: Type IV



Caltrans: TV-2-T
ADOT: Type VI



Caltrans: TV-3-T
ADOT: Type IX

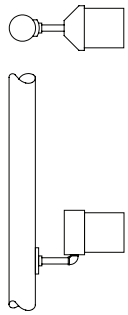
Note: All signals shown without backplates for clarity.

McCAIN SIGNAL FRAMEWORK

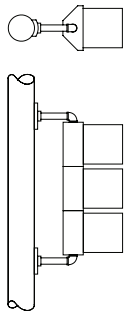
SIDE-OF-POLE MOUNTING

Without Terminal Compartments

ONE WAY

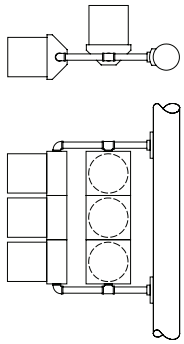


Caltrans: SV

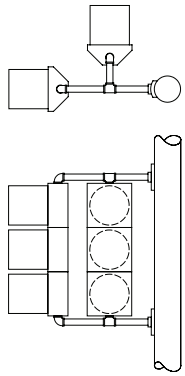


Caltrans: SV-1
ADOT: Type XI

TWO WAY



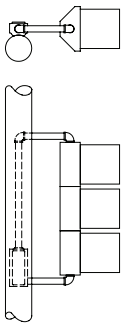
Caltrans: SV-2A



Caltrans: SV-2B

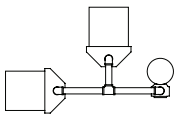
With Terminal Compartments

ONE WAY

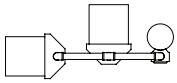


Caltrans: SV-1-T
ADOT: Type V
NDOT: B-1

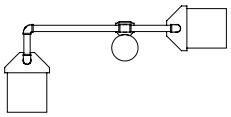
TWO WAY



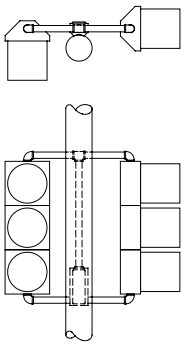
Caltrans: SV-2-TD
ADOT: Type VIII
NDOT: B-2b



Caltrans: SV-2-TC
NDOT: B-2b

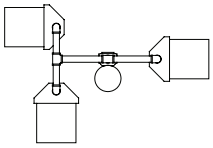


Caltrans: SV-2-TB

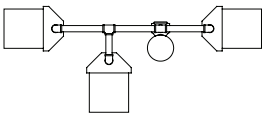


Caltrans: SV-2-TA
ADOT: Type VII

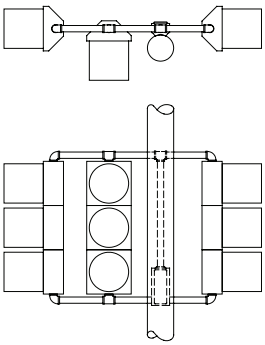
THREE WAY



Caltrans: SV-3-TC
NDOT: B-3a

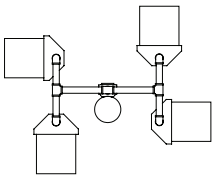


Caltrans: SV-3-TB
NDOT: B-3c

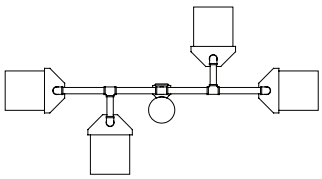


Caltrans: SV-3-TA
NDOT: N-3b

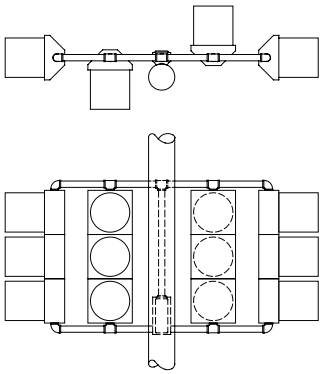
FOUR WAY



Caltrans: SV-4-TC



Caltrans: SV-4-TB



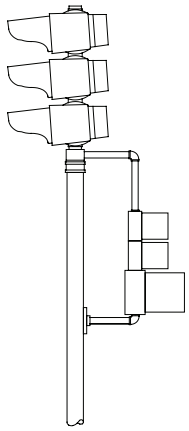
Caltrans: SV-4-TA

Note: All signals shown without backplates for clarity.

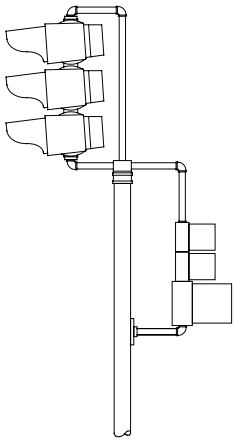
McCAIN SIGNAL FRAMEWORK

LEFT TURN MOUNTING

Without Terminal Compartments

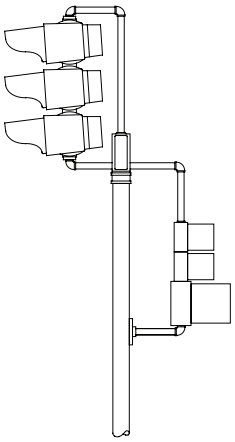


Caltrans: LT-2-A



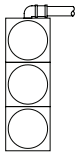
Caltrans: LT-2-B

With Terminal Compartments

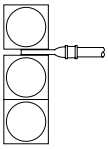


Caltrans: LT-2-T
ADOT: Type X

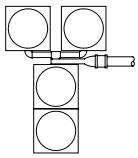
MAST ARM MOUNTINGS



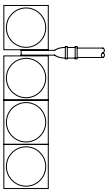
Caltrans: MAT
ADOT: Type I



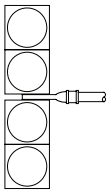
Caltrans: MAS
ADOT: Type II



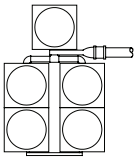
Caltrans: MAS-4A



Caltrans: MAS-4B



Caltrans: MAS-4C



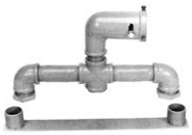
Caltrans: MAS-5A

ONE WAY

Caltrans:MAS

Caltrans:MAT-1

TWO WAY



Caltrans: MAT-2

THREE WAY

Caltrans: MAT-3

FOUR WAY

Caltrans: MAT-4

Note: All signals shown without backplates for clarity.

SPAN WIRE MOUNTING

ONE WAY

Caltrans: SW-1

TWO WAY

Caltrans: SW-2

THREE WAY

Caltrans: SW-3

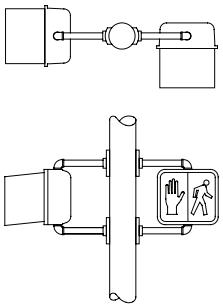
FOUR WAY

Caltrans: SW-4

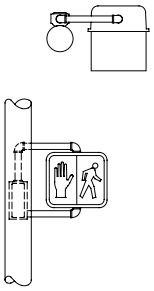
PEDESTRIAN MOUNTING*

Side-of-Pole

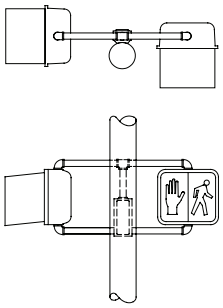
Caltrans: SP-1
ADOT: Type XI



Caltrans: SP-2



Caltrans: SP-1-T
ADOT: Type V
NDOT: WS-1 (modified)

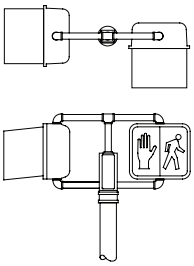


Caltrans: SP-2-T
ADOT: Type VII
NDOT: WS-2

Top-of-Pole

Caltrans: TP-1
NDOT:WT-1

Caltrans: TP-1-T
ADOT: Type IV



Caltrans: TP-2-T
ADOT: Type VI
NDOT: WT-2

Note: ADOT Type VIII ped is the same configuration as Caltrans SV-2-TD signal.

ADAPTERS AND MOUNTS

Top-of-Pole

		ALUMINUM	BRONZE
	Adapter, terminal compartment, top-of-pole, 2-way[1]	Not Available	M18812 (green) M68965 (black)
	Adapter, terminal compartment, top-of-pole, 3-way[1]	Not Available	M18817 (green) M68966 (black)
	Adapter, top-of-pole, offset mount, serrated[2]	Not Available	M18511 (green) M33300 (black)
	Adapter, top-of-pole, offset mount, serrated 1-side port[2]	Not Available	M18805-1 (green)
	Adapter, top-of-pole, center mount, plain 2 side ports 180°	Not Available	M18807
	Adapter, top-of-pole, center mount, plain 4 side ports 90°	Not Available	M45668 (green) M45670 (black)
	Adapter, cabinet pedestal, top-of-pole, 4½" O.D. pole	Not Available	M15323 (silver)

[1]Includes 12-position terminal block, door and gasket
[2]Includes lock nipple
Notes:
1. All slip fittings furnished with set screws.
2. Bronze refers to compartment material; doors are aluminum.
3. Customer must specify a color for part numbers not associated with a specific color as noted.
4. Additional colors are available. Please contact your SWARCO McCain, Inc. representative for details.

ADAPTERS AND MOUNTS *(CONTINUED)*

Side-of-Pole

		ALUMINUM	BRONZE
	Adapter, terminal compartment, side-of-pole, 2-way, saddle back with gable guide (center of back) and mounting holes[1]	Not Available	M18824 (green) M68967 (black)
	Adapter, terminal compartment, side-of-pole, 2-way, saddle back with cable guide (bottom of back) and mounting holes[1]	Not Available	M18826 (green)
	Adapter, terminal compartment, side-of-pole, 2-way, flat back with cable entrance (center of back) and mounting holes[1]	Not Available	M18879
	Terminal compartment door	M54293 (green) M54294 (black)	Not Available
	Pole plate with cable guide	Not Available	M30926 (green)
	Pole Plate without cable guide	Not Available	M31251 (green)
	Pole plate, bandable	M18791	Not Available

[1]Includes 12-position terminal block, door and gasket

Notes:

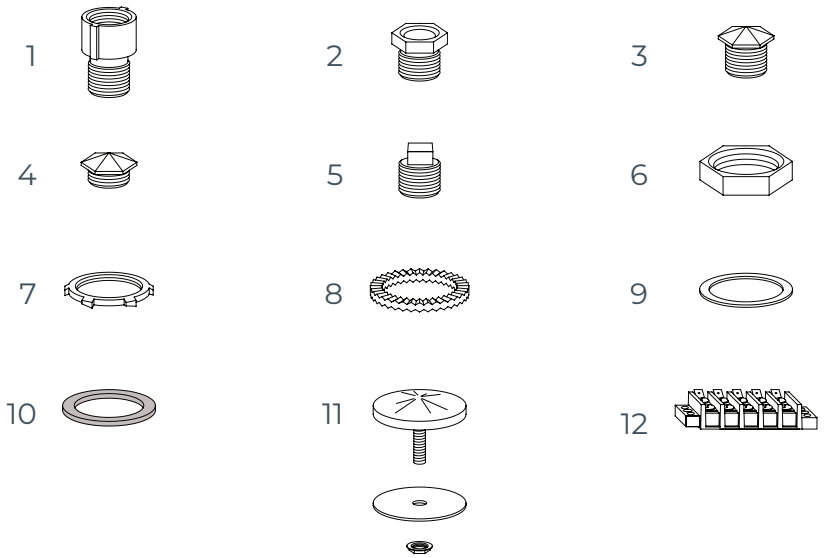
1. All slip fittings furnished with set screws.
2. Bronze refers to compartment material; doors are aluminum.
3. Customer must specify a color for part numbers not associated with a specific color as noted.
4. Additional colors are available. Please contact your SWARCO McCain, Inc. representative for details.

McCAIN SIGNAL FRAMEWORK

PIPE FITTINGS*

1. Elbow standard
2. Elbow, flanged, 1 port
3. Elbow, serrated, 1 port
4. Elbow, slip fit, 1 port
5. Coupling, serrated, 1 port
6. Cross, standard
7. Cross, slip fit, 1 port; slip cross, slip fit two opposite ports
8. Cross, serrated, 1 port
9. Tee, standard
10. Tee, slip fit, side port
11. Tee, serrated, side port
12. Tee, serrated, run 1 port
13. Tee, side outlet
14. Tee, slip fit, side outlet
15. Slip tee, slip fit on run, 2 ports; tee, slip fit on run, 1 port

FRAMEWORK PARTS*



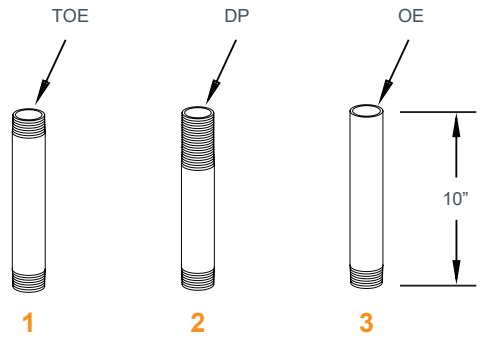
1. Extender, flanged; Shur-lok
2. Lock nipple
3. Cap, ornamental, long, 1½”
4. Cap, ornamental, short, ½”
5. Plug, square head, 1½”
6. Locknut, malleable iron
7. Locknut, conduit, cadmium plated
8. Lock ring, serrated
9. Washer, flat, aluminum
10. Washer, neoprene
11. Cap, stud, mono[1]
12. Terminal block, 5-position[2]

*1½-11½ NPT
[1]Available in yellow, green, and black only
[2]Other sizes available

McCAIN SIGNAL FRAMEWORK

PIPE AND NIPPLES

EXAMPLES



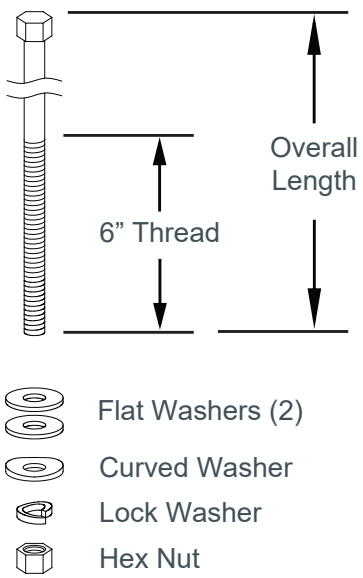
Designation for pipe shown above:
Pipe No. 1: 10” color, TOE, TOE
Pipe No. 2: 10” color, TOE, DP
Pipe No. 3: 10” color, TOE, OE

DETAILS TO INCLUDE WHEN ORDERING:

- Length
- Color
- Types of ends:
  - OE: Open End; not threaded
  - TOE: Threaded on End
  - DP: Drop Pile; 3” threads

BOLTS AND HARDWARE

BOLT ASSEMBLY



BOLTS

- Hot-dipped, galvanized, extended thread lengths
- Bolt lengths available in ½”-13 UNC and ⅝”-11 UNC[1]:
  - 6”
  - 8”
  - 10”
  - 12”
  - 14”
  - 16”
  - 18”
- Additional bolt lengths in ½” only:
  - 7”
  - 20”
  - 22”
  - 24”

BOLT ASSEMBLY

A complete bolt assembly consists of the following:

- 2 Flat washers
- 1 Curved washer
- 1 Lock washer
- 1 Hex nut
- 1 Bolt[2]

[1]LA City
[2]At specified length

www.swarco.com/mccain

SWARCO reserves the right to make changes at any time in order to supply the best product possible.
©SWARCO McCain, Inc. Updated 05/23/2023