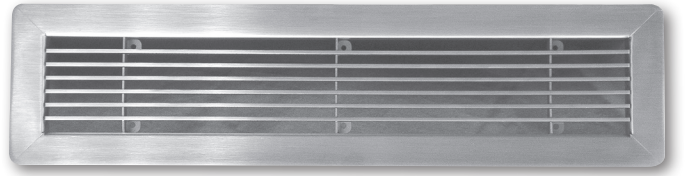


INTRODUCTION

The 91610, 91620 and 91520 architectural linear stainless steel bar grilles are designed to provide a clean, strong, horizontal look while offering optimum performance. The availability of a variety of frames allow the grilles to blend, compliment, or contrast with the ceiling, sidewall, or sill installations. These grilles can be used on supply or return portions of heating, cooling or ventilation systems. The 91610, 91620 and 91520 series linear stainless steel bar grille is an excellent choice for installation in soffit/sill applications where airflow is required to wash over a window in a high humidity location.



FEATURES

- Single section lengths from 4" to 60"; widths from 4" - 24"
- 304 Stainless steel construction (316 optional)
- Standard finish is 90 - #4 Satin Polish or 44 - British White

MODELS

- 91610 - Supply or return linear bar grille with 0° or 15° blade deflection, 3/8" bar spacing, and 1/8" bar thickness
- 91620 - Supply or return linear bar grille with 0° or 15° blade deflection, 1/2" bar spacing, and 1/8" bar thickness
- 91520 - Supply or return linear bar grille with 0° blade deflection, 1/2" bar spacing, and 1/4" bar thickness

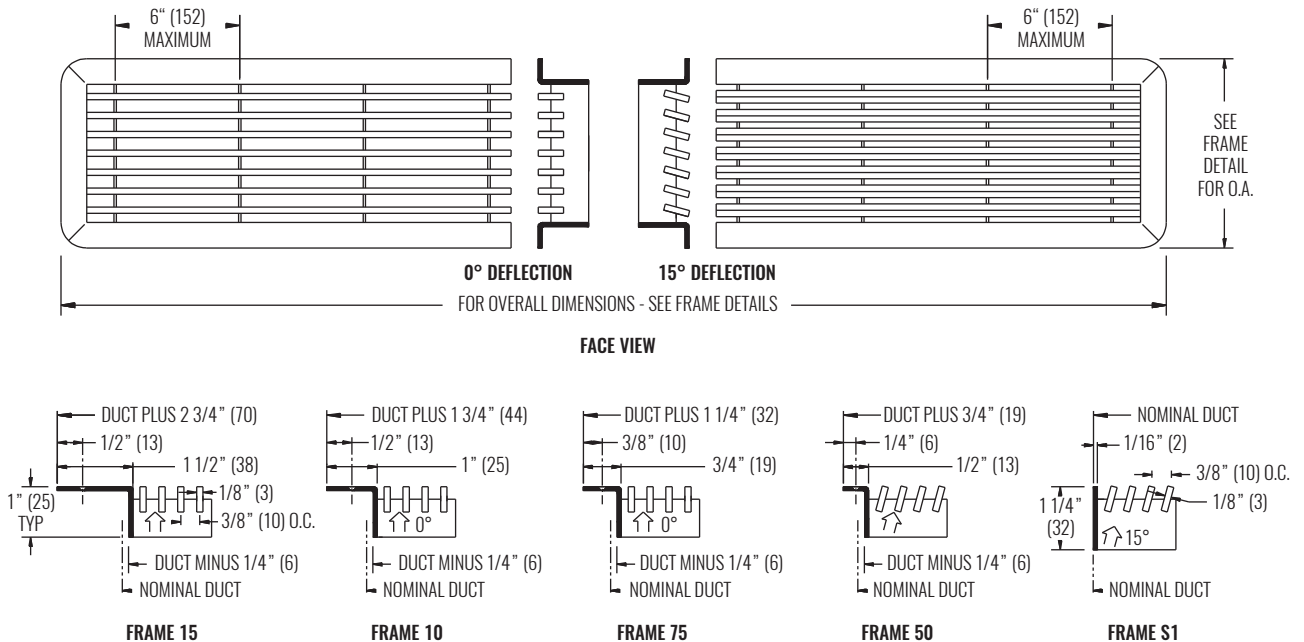
OPTIONS

- Concealed fastening

ACCESSORIES

- Stainless steel OBD welded to unit, adjustable from face of grille (model 9OBD)
- Blank-off strip
- Linear straightening grid

DIMENSIONAL DATA | 91610



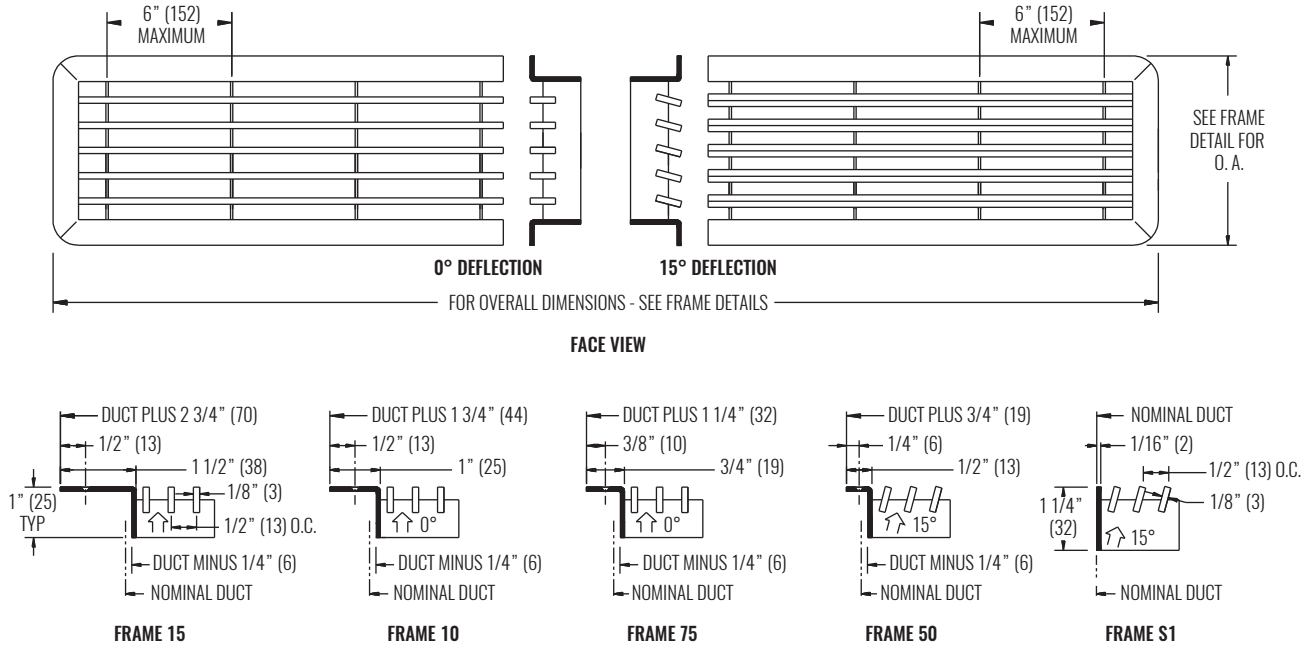
NOTE: Dimensions in parentheses are millimeters (mm).

91610, 91620, 91520

Stainless Steel Supply Grilles, Linear Bar

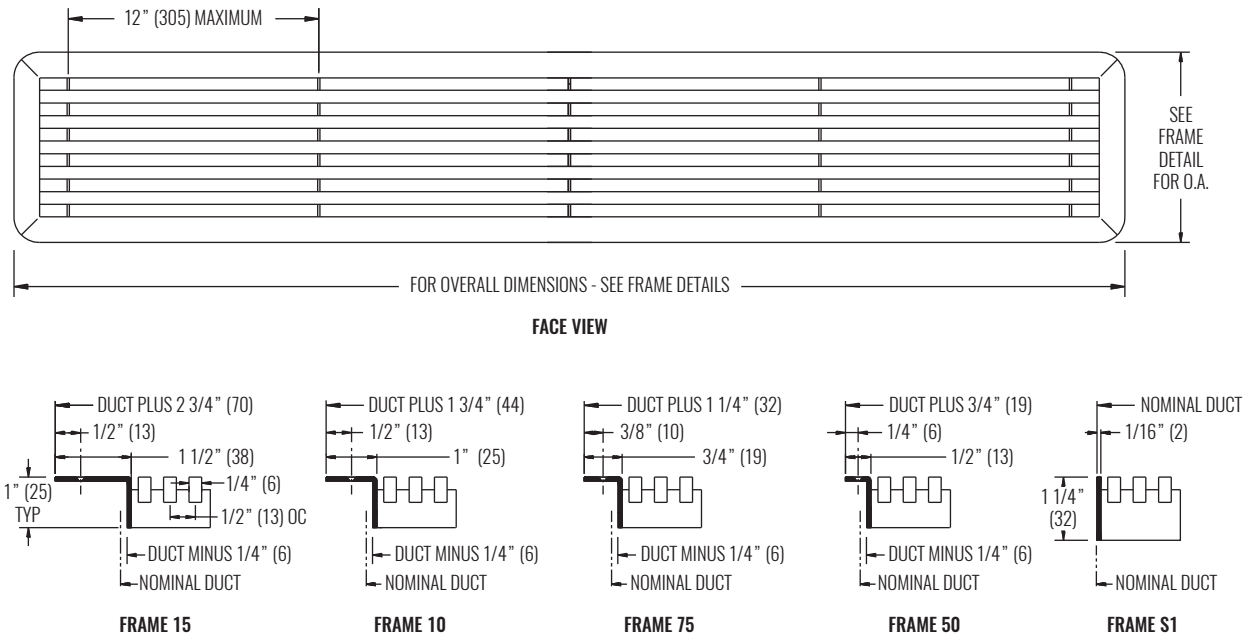


DIMENSIONAL DATA | 91620



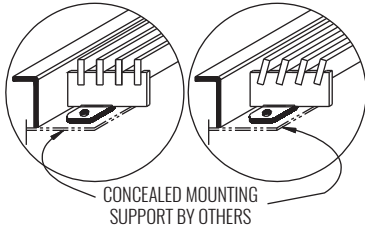
NOTE: Dimensions in parentheses are millimeters (mm).

DIMENSIONAL DATA | 91520

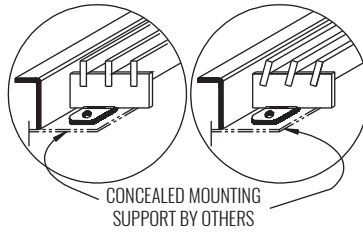


NOTE: Dimensions in parentheses are millimeters (mm).

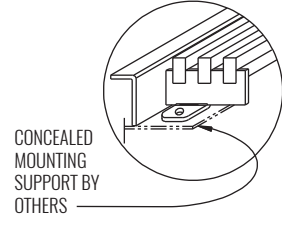
DIMENSIONAL DATA | CONCEALED FASTENING



91610 CONCEALED FASTENING

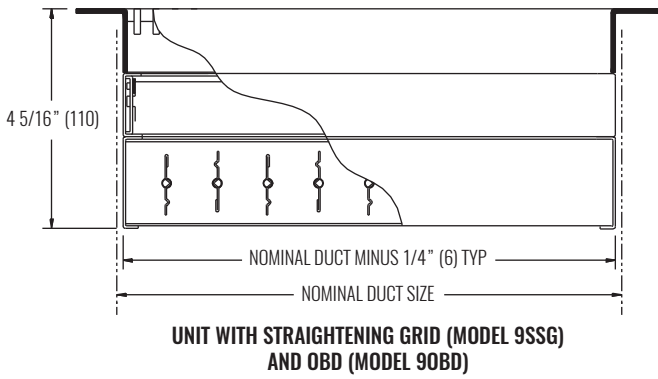


91620 CONCEALED FASTENING

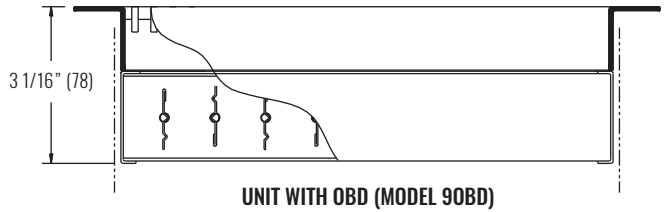
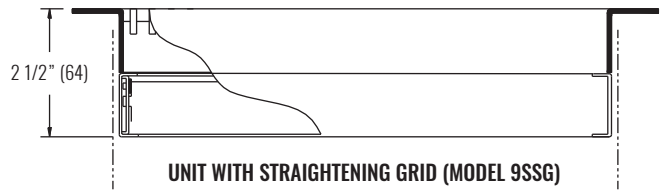


91520 CONCEALED FASTENING

DIMENSIONAL DATA | ACCESSORIES



NOTE: Dimensions in parentheses are millimeters (mm).



91610, 91620, 91520

Stainless Steel Supply Grilles, Linear Bar



GRILLES | STAINLESS STEEL

PERFORMANCE DATA | 91610 | ROUND NECK, 0° DEFL, 1/8" BARS, 3/8" BAR SPACING, NO DAMPER

NOM DUCT	IP DATA				SOUND	METRIC DATA				
	NECK VEL	AIR FLOW	Ps	1-CORE THROW		NOM DUCT	NECK VEL	AIR FLOW	Ps	1-CORE THROW
in	fpm	cfm	in wg	ft	NC	cm	m/s	l/s	Pa	cm
4	200	67	.010	12	<25	10.2	1.02	32	2.5	378
	400	133	.040	15	<25		2.03	63	10.0	472
	600	200	.090	18	26		3.05	94	22.4	567
	800	267	.150	20	35		4.06	126	37.4	630
8	200	133	.010	14	<25	20.3	1.02	63	2.5	441
	400	267	.040	19	<25		2.03	126	10.0	598
	600	400	.090	23	29		3.05	189	22.4	724
	800	533	.150	25	36		4.06	252	37.4	787
12	200	200	.010	17	<25	30.5	1.02	94	2.5	535
	400	400	.040	23	<25		2.03	189	10.0	724
	600	600	.090	27	32		3.05	283	22.4	850
	800	800	.150	30	39		4.06	378	37.4	944

PERFORMANCE DATA | 91610 | ROUND NECK, 15° DEFL, 1/8" BARS, 3/8" BAR SPACING, NO DAMPER

NOM DUCT	IP DATA				SOUND	METRIC DATA				
	NECK VEL	AIR FLOW	Ps	1-CORE THROW		NOM DUCT	NECK VEL	AIR FLOW	Ps	1-CORE THROW
in	fpm	cfm	in wg	ft	NC	cm	m/s	l/s	Pa	cm
4	200	67	.010	12	<25	10.2	1.02	32	2.5	378
	400	133	.040	15	<25		2.03	63	10.0	472
	600	200	.090	17	28		3.05	94	22.4	535
	800	267	.150	19	36		4.06	126	37.4	598
8	200	133	.010	13	<25	20.3	1.02	63	2.5	409
	400	267	.040	18	<25		2.03	126	10.0	567
	600	400	.090	21	31		3.05	189	22.4	661
	800	533	.150	23	39		4.06	252	37.4	724
12	200	200	.010	15	<25	30.5	1.02	94	2.5	472
	400	400	.040	20	<25		2.03	189	10.0	630
	600	600	.090	25	32		3.05	283	22.4	787
	800	800	.150	28	40		4.06	378	37.4	881

NOTES: Throw values are based on a 4 foot sill grille and 100 FPM vertical throw. Throw values are given for isothermal conditions. Sound data based on a 4 foot grille. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70-1991. For return use, pressure drop and NC levels are approximately the same.

LENGTH AND NC CORRECTION FACTORS

ACTIVE LENGTH	2.00	4.00	8.00	12.00	16.00	24.00	40+
NC THROW CORRECTION	-3.00	0.00	3.00	5.00	6.00	8.00	10.00

PERFORMANCE DATA | 91620 | ROUND NECK, 0° DEFL, 1/8" BARS, 1/2" BAR SPACING, NO DAMPER

NOM DUCT	IP DATA				SOUND	METRIC DATA				
	NECK VEL	AIR FLOW	Ps	1-CORE THROW		NOM DUCT	NECK VEL	AIR FLOW	Ps	1-CORE THROW
in	fpm	cfm	in wg	ft	NC	cm	m/s	l/s	Pa	cm
4	200	67	.010	12	<25	10.2	1.02	32	2.5	378
	400	133	.040	15	<25		2.03	63	10.0	472
	600	200	.090	18	26		3.05	94	22.4	567
	800	267	.150	20	35		4.06	126	37.4	630
8	200	133	.010	14	<25	20.3	1.02	63	2.5	441
	400	267	.040	19	<25		2.03	126	10.0	598
	600	400	.090	23	29		3.05	189	22.4	724
	800	533	.150	25	36		4.06	252	37.4	787
12	200	200	.010	17	<25	30.5	1.02	94	2.5	535
	400	400	.040	23	<25		2.03	189	10.0	724
	600	600	.090	27	32		3.05	283	22.4	850
	800	800	.150	30	39		4.06	378	37.4	944

PERFORMANCE DATA | 91620 | ROUND NECK, 15° DEFL, 1/8" BARS, 1/2" BAR SPACING, NO DAMPER

NOM DUCT	IP DATA				SOUND	METRIC DATA				
	NECK VEL	AIR FLOW	Ps	1-CORE THROW		NOM DUCT	NECK VEL	AIR FLOW	Ps	1-CORE THROW
in	fpm	cfm	in wg	ft	NC	cm	m/s	l/s	Pa	cm
4	200	67	.010	12	<25	10.2	1.02	32	2.5	378
	400	133	.040	15	<25		2.03	63	10.0	472
	600	200	.090	17	28		3.05	94	22.4	535
	800	267	.150	19	36		4.06	126	37.4	598
8	200	133	.010	13	<25	20.3	1.02	63	2.5	409
	400	267	.040	18	<25		2.03	126	10.0	567
	600	400	.090	21	31		3.05	189	22.4	661
	800	533	.150	23	39		4.06	252	37.4	724
12	200	200	.010	15	<25	30.5	1.02	94	2.5	472
	400	400	.040	20	<25		2.03	189	10.0	630
	600	600	.090	25	32		3.05	283	22.4	787
	800	800	.150	28	40		4.06	378	37.4	881

NOTES: Throw values are based on a 4 foot sill grille and 100 FPM vertical throw. Throw values are given for isothermal conditions. Sound data based on a 4 foot grille. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70-1991. For return use, pressure drop and NC levels are approximately the same.

LENGTH AND NC CORRECTION FACTORS

ACTIVE LENGTH	2.00	4.00	8.00	12.00	16.00	24.00	40+
NC THROW CORRECTION	-3.00	0.00	3.00	5.00	6.00	8.00	10.00

91610, 91620, 91520

Stainless Steel Supply Grilles, Linear Bar



PERFORMANCE DATA | 91520 | ROUND NECK, 0° DEFL, 1/4" BARS, 1/2" BAR SPACING, NO DAMPER

NOM DUCT	IP DATA				SOUND	METRIC DATA				
	NECK VEL	AIR FLOW	Ps	1-CORE THROW		NOM DUCT	NECK VEL	AIR FLOW	Ps	1-CORE THROW
	in	fpm	cfm	in wg		ft	NC	cm	m/s	l/s
4	200	67	.010	12	<25	10.2	1.02	32	2.5	378
	400	133	.040	15	<25		2.03	63	10.0	472
	600	200	.090	17	<25		3.05	94	22.4	535
	800	267	.160	19	32		4.06	126	39.8	598
8	200	133	.010	14	<25	20.3	1.02	63	2.5	441
	400	267	.040	18	<25		2.03	126	10.0	567
	600	400	.090	21	26		3.05	189	22.4	661
	800	533	.160	26	35		4.06	252	39.8	818
12	200	200	.010	15	<25	30.5	1.02	94	2.5	472
	400	400	.040	21	<25		2.03	189	10.0	661
	600	600	.090	25	28		3.05	283	22.4	787
	800	800	.160	28	36		4.06	378	39.8	881

NOTES: Throw values are based on a 4 foot sill grille and 100 FPM vertical throw. Throw values are given for isothermal conditions. Sound data based on a 4 foot grille. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70-1991. For return use, pressure drop and NC levels are approximately the same.

LENGTH AND NC CORRECTION FACTORS

ACTIVE LENGTH	2.00	4.00	8.00	12.00	16.00	24.00	40+
NC THROW CORRECTION	-3.00	0.00	3.00	5.00	6.00	8.00	10.00

GRILLES | STAINLESS STEEL

ENGINEERING SPECIFICATION & CONFIGURATION

91610

The linear bar grille shall be Krueger model 91610 with 1/8" thick fixed bars at 0° or 15° deflection spaced on 3/8" centers. The 91610 shall be constructed of 304 stainless steel with the maximum length of 72". When end pieces require an end cap, the end cap must be welded to the linear frame. Screw attachment of end caps will not be accepted.

The 91610 linear bar core shall be welded to the 304 stainless steel frame with the fixed deflection bars running parallel to the longest dimension. Support bars for the core must not exceed 6" on center spacing.

Optional linear opposed blade damper (9OBD) shall be constructed of 304 stainless steel and welded to the 91610. Damper shall be operable from the face of the grille.

Optional 316 stainless steel construction available.

91620

The linear bar grille shall be Krueger model 91620 with 1/8" thick fixed bars at 0° or 15° deflection spaced on 1/2" centers. The 91620 shall be constructed of 304 stainless steel with the maximum length of 60". When end pieces require an end cap, the end cap must be welded to the linear frame. Screw attachment of end caps will not be accepted.

The 91620 linear bar core shall be welded to the 304 stainless steel frame with the fixed deflection bars running parallel to the longest dimension. Support bars for the core must not exceed 6" on center spacing.

Optional linear opposed blade damper (9OBD) shall be constructed of 304 stainless steel and welded to the 91620. Damper shall be operable from the face of the grille.

Optional 316 stainless steel construction available.

91520

The linear bar grille shall be Krueger model 91520 with 1/4" thick fixed bars at 0° deflection spaced on 1/2" centers. The 91520 shall be constructed of 304 stainless steel with the maximum length of 60". When end pieces require an end cap, the end cap must be welded to the linear frame. Screw attachment of end caps will not be accepted.

The 91520 linear bar core shall be welded to the 304 stainless steel frame with the fixed deflection bars running parallel to the longest dimension. Support bars for the core must not exceed 12" on center spacing.

Optional linear opposed blade damper (9OBD) shall be constructed of 304 stainless steel and welded to the 91520. Damper shall be operable from the face of the grille.

Optional 316 stainless steel construction available.

FINISH

The finish shall be 90 - #4 Satin Polish, obtained by finishing with a 120-grit abrasive, or 44 - British White.

1. SERIES: (XXXXX)

91610 - Linear Bar Grille, 1/8" Bars & 3/8" Spacing
 91620 - Linear Bar Grille, 1/8" Bars & 1/2" Spacing
 91520 - Linear Bar Grille, 1/4" Bars & 1/2" Spacing

2. WIDTH: (XX.XXX)

4" - 60" in 1/16" Increments

3. HEIGHT: (XX.XX)

4" - 24" in 1/4" Increments

4. MATERIAL: (XXX)

304 - Stainless Steel Grade 304
 316 - Stainless Steel Grade 316

5. DEFLECTION: (XX)

00 - 0° Deflection
 15 - 15° Deflection *

6. FRAME STYLE: (XXX)

F15 - 1 1/2" Flange
 F10 - 1" Flange
 F75 - 3/4" Flange
 F50 - 1/2" Flange
 S1 - Straight, No Flange

7. FASTENING METHOD: (XX)

00 - None
 02 - Surface Mount, Concealed **
 03 - Screw Hole Mounting ***

8. END BORDER: (X)

0 - End Cap, Both Sides
 B - Butt Cut, Both Sides
 L - Butt Cut, Left Side
 R - Butt Cut, Right Side

9. DAMPER: (XX)

00 - No Damper
 01 - Stainless Steel OBD †

10. ACCESSORIES: (X)

0 - No Accessories
 B - Blank-off Strip
 L - Linear Straightening Grid ‡

11. FINISH: (XX)

90 - #4 Satin Polish
 44 - British White

* 91520 not available with 15° deflection.

** Surface Mount, Concealed Fastening is not available with 15° deflection.

*** Screw Hole Fastening Method not available with Frame S1.

† Damper is welded to unit and is not available with Blank-off Strip Accessory or Surface Mount, Concealed Fastening Method.

‡ Not available with both Blank-off Strip & Straightening Grid

SAMPLE CONFIGURATION: 91620 - 55.125x8.25 - 304 - 15 - F10 - 03 - 0 - 00 - 0 - 90