

About Our CNC Machined Flanges

Materials: All flanges are available in Cold Rolled Steel or 304 Stainless Steel by special order.
Add S for 304 Stainless

Thickness: Standard thickness is 3/8". Most flanges can be special ordered 1/2" thick.

Port Size = Tube Size: Sizes shown for port in flange indicates the size tube that can be formed to slip into the flange. Most of our flanges are designed to allow the tube to slip through the flange.



*Stub Tubes available for most flanges
by Special Order.*



Port Shapes: Round ports are machined .020"-.030" over advertized size.
Other shapes are as much as .070" over nominal tube size to allow for easier tube shaping.

SAP - "Same As Port" - Flange closely matches port shape in cylinder head.

Round - For stock round ports or oversized tube applications

D-Port - Typically flat floor and sides with radius on roof of port.

Oval - Two sides half round. Horizontal and vertical oval.

Square - Nearly equal height and width with varied corner radius.

Square Oval - Made popular by the 18° Chevy, has radiused roof and floor.

Rectangle - Longer or taller than wide or high.

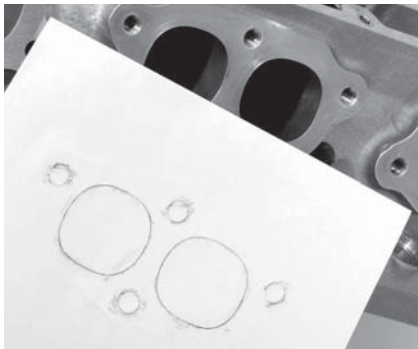
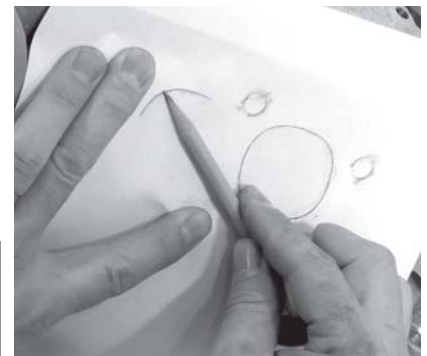
Making a pencil transfer (*Rubbing*)

Due to the rapidly changing cylinder head industry, you may be asked to send a rubbing of your exhaust ports.



Place a sheet of paper covering port(s).
Holding it firmly with one hand, use
your index finger to rub the edges of
the port(s) and bolt holes.

Holding the pencil's face flat
against the paper, define the ports,
bolt pattern and sealing surface.



Make sure the transfer is
accurate and the paper did
not slip during the process.

If you are faxing or scanning,
please include a scale along with
your contact information as the fax
machine will shrink the image.



General Motors



GMC OHV Six

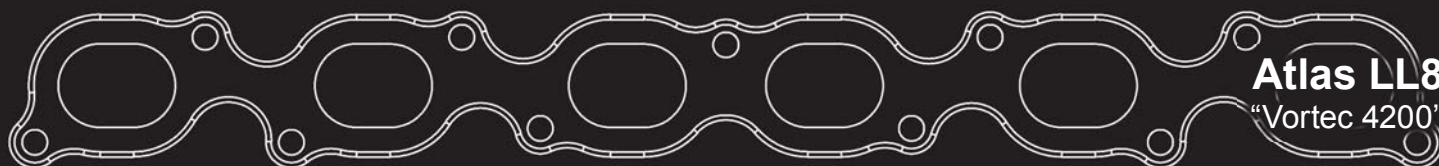


**Left
GMC615113-5LT**



**Right
GMC615113-5RT**

1939-1962 GMC Overhead Valve Straight Six engines. 248cid. - 270cid. - 302cid.



**Atlas LL8
"Vortec 4200"**

Atlas LL8 "Vortec 4200"

- 2002-09 Trailblazer (Chevy)
- 2002-09 Envoy (GMC)
- 2002-04 Bravada (Olds)
- 2002-09 Renier (Buick)
- 2002-09 Ascender (Isuzu)
- 2002-09 9-7x (SAAB)



C6156xx

- C615641 1.50" Oval
- C615642 1.63" Oval
- C615643 1.75" Oval



Left

- C615641L
- C615642L
- C615643L



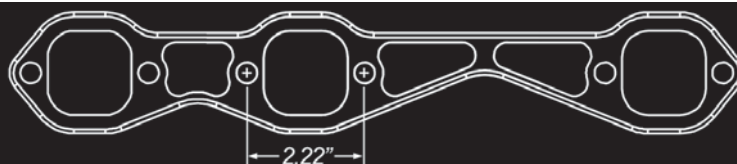
Center

- C615641C
- C615642C
- C615643C



Right

- C615641R 1.50" Oval
- C615642R 1.63" Oval
- C615643R 1.75" Oval



90 Degree V6

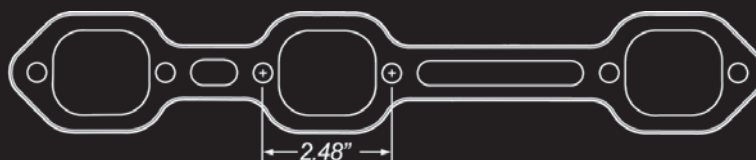
1977-Present 4.3L / 262cid.

- Square** C60052 1.63"
- C60053 1.75"

For individual flanges see C800xx-I



C600xx



**90 Degree V6
18° Head**

"Busch" Grand National
(Up to-1995)

- Square** C60464 1.63"
- C60465 1.75"

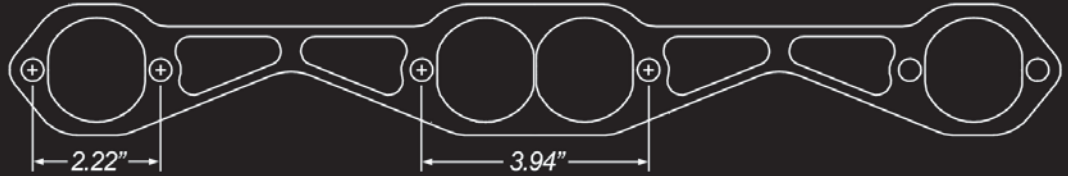
For individual flanges see C804xx-I



C604xx

General Motors

Gen I & Gen II Small Block



C800xx

Add "C" & "E" for individual flanges



Round C80022 1.63" Early (stock OEM)

D-Port C80032 1.63" Brodix Track 1, Spec
C80033 1.75" Brodix KC 227 CNC Track 1

Oval C80043 1.75" 1.80" Height x 1.68" Width
.650" Radius

Square C80052 1.63" Late Model, Vortec (stock
C80053 1.75" OEM)
C80054 1.88" Edelbrock Perf RPM

C803xx

Add "C" & "E" for individual flanges



D-Port C80332 1.63" LT-1 / LT-4 / ZZ4 (stock OEM)
C80333 1.75"

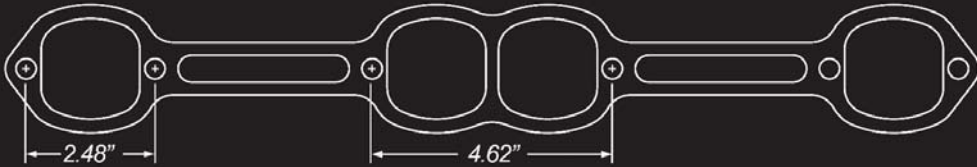
C835xx

Add "C" & "E" for individual flanges



D-Port C83532 1.63" Fastburn (stock OEM)
C83533 1.75"

GM 18 Degree



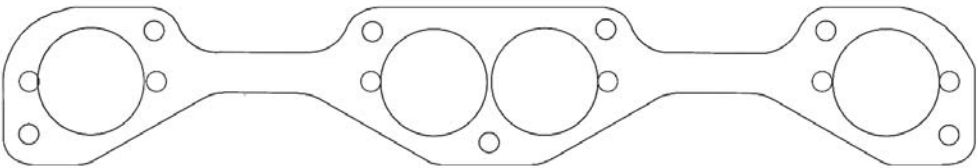
C804xx

Sq. Oval C80444 1.88" GM Perf Parts 18°
C80445 2.00" CFE 18° • TFS 18°

Sq. Oval Raised Port C80444RP 1.88"
C80445RP 2.00"

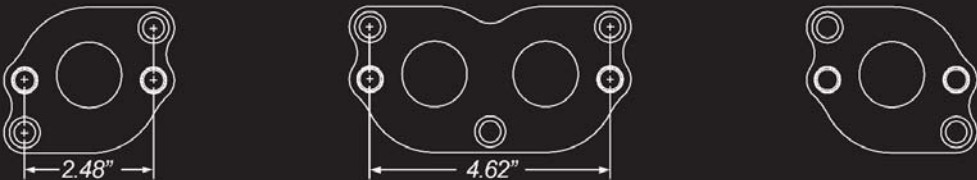
Reher-Morrison
GM 18° Adapters

Not available from SPD

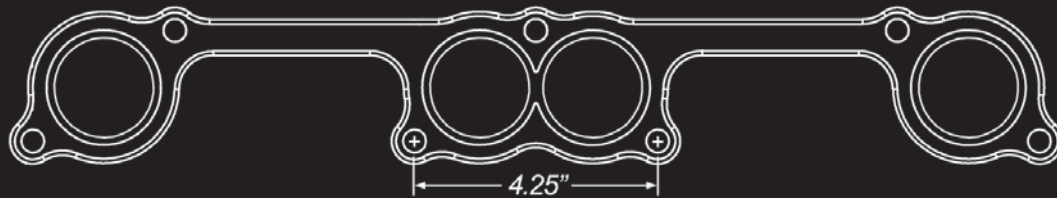


GM 18 Degree Hendrick Adaptor

Call for availability



General Motors



**7 Bolt
Hooker Pattern
23° Adapters**

Use with **Hooker** adapters

Round	Part #	Height
C83423	1.75"	
C83424	1.88"	
C83425	2.00"	
C83426	2.13"	



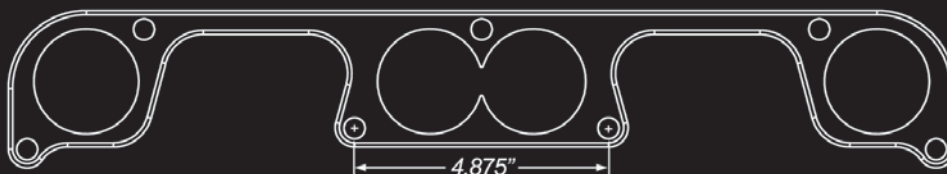
C834xx

ARAO Engineering
Dominion 32 Valve

D-Port	Part #	Height
C84855	2.00"	
C84856	2.13"	



C848xx



**7 Bolt
Stahl Pattern
23° Adapters**

Use with AC80120 adapters
or other Stahl pattern adapters.
Also fits some **non-spread port**
aftermarket heads such as:
Brodix -8 / -10 / -11

Round	Part #	Height
C80223	1.75"	
C80224	1.88"	
C80225	2.00"	
C80226	2.13"	



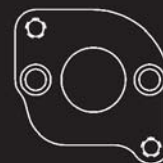
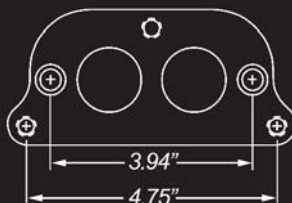
C802xx

• Pontiac 867 • Chapman -10X •
• All Pro 227 •
(or use with AC80120 adapters)

Square	Part #	Height
C82963	1.75"	
C82964	1.88"	
C82965	2.00"	



C829xx



**7 Bolt
Stahl Pattern
Adapter Kit**

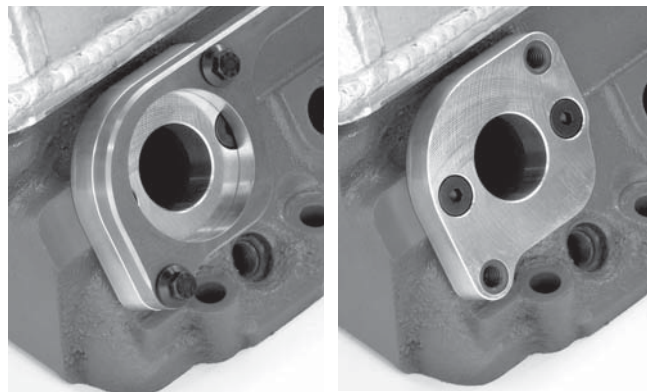
AC80120 Aluminum Adapter Kit

Shown as one kit



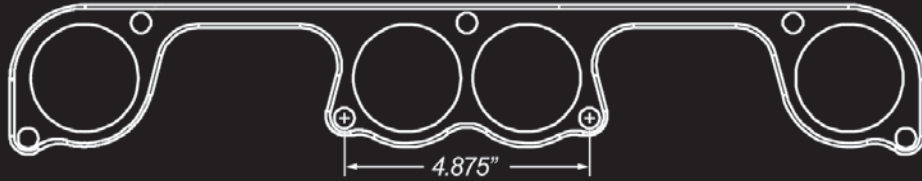
Uses low head allen bolts

For use with 23° Non Spread Port heads to allow the use of larger tube sizes than are possible with the stock bolt pattern.



General Motors

**Spread Port
7 Bolt
Stahl Pattern**



C812xx



Round	C81224	1.88"
	C81225	2.00"
	C81226	2.13"

Sq Oval	C81244	1.88"
	C81245	2.00"

*Add "C", "L" & "R"
for individual flanges*

Brodix 12° 13° 15° 16° 18°

Chapman 18°

All Pro 18°

C813xx



Round	C81324	1.88"
	C81325	2.00"
	C81326	2.13"

Sq Oval	C81344	1.88"
	C81345	2.00"

C814xx



Square	C81463	1.75"
	C81464	1.88"
	C81465	2.00"

Chapman -10x Spread Port

C816xx



D-Port	C81634	1.88"
	C81635	2.00"
	C81636	2.13"

Brodix 12 x 12

C818xx



Round	C81824	1.75"
	C81825	1.88"
	C81826	2.00"

Brodix -10 & 11SP

Weld Tech 23SP



D-Port	C81833	1.75"
	C81834	1.88"
	C81835	2.00"

ARF220 23SP

C830xx



SAP	C83053	1.75"
	C83054	1.88"

All Pro 227SP

C8159xx



SAP	C815954	1.88"
	C815955	2.00"

Ultra Pro Machine 9°


*Add "C", "L" & "R"
for individual flanges*

General Motors

SBC Spread Port Stahl Pattern (Continued)

Early: Dart 15° & 18° & Olds 14°	C84324	1.88"	Round		C843xx
	C84325	2.00"			
	C84326	2.13"			
<i>Add "C", "L" & "R" for individual flanges</i>					


C84324RP	1.88"	Raised Port Round		
C84325RP	2.00"			
C84326RP	2.13"			

Dart 15° 16° & 18°	C84454	1.88"	SAP		C844xx
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Dart 12.5°	C815414	1.88"	Rectangle		C8154xx
	C815415	2.00"			







**7 Bolt
Alan Johnson
Not Reher Morrison**

21° & 23° Dominator	C82224	1.88"	Round		C822xx
18° Outlaw Late Model	C82225	2.00"			
Early Version 12° Pro Outlaw Later Version (see C812xx)	C82226	2.13"			



**Gen III & Gen IV
Small Block**

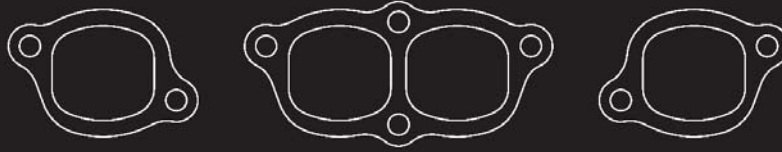
LS3-L92 ▶	C81123	1.75"	Round		C811xx
	C81124	1.88"			
LS1 - LS2 - LS6	C81125	2.00"			
	C81142	1.63"	SAP		
	C81143	1.75"			
	C81144	1.88"			

LS7	C80524	1.88"	Round		C805xx
	C80525	2.00"			
All-Pro LSW (may require 3/8" drilled flange) ▶	C80526	2.13"			
LS7 / LQ9 Stock port size & shape (Evolved from Katech C5-R)	C80553	1.75"	SAP		
	C80554	1.88"			

NEW! World Products LSX	C816155	2.08"	SAP		C8156xx
	C816156	2.13"			

General Motors (SBC Splayed Valve)

SB2



C806xx



Round	Part #	Size
	C80624	1.88"
	C80625	2.00"
	C80626	2.13"



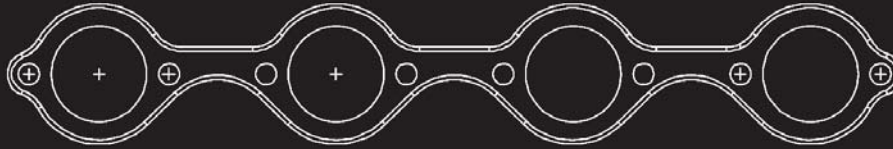
Square Oval	Part #	Size
	C80644	1.88"
	C80645	2.00"

1998-07 NASCAR Cup Series
Same as factory port SB2 & SB2.2



Add *I* for Individual flanges

GM Racing Splayed Valve



C820xx



Round	Part #	Size
	C82023	1.75"
	C82024	1.88"
	C82025	2.00"

Chevy "Splayed" GM Performance

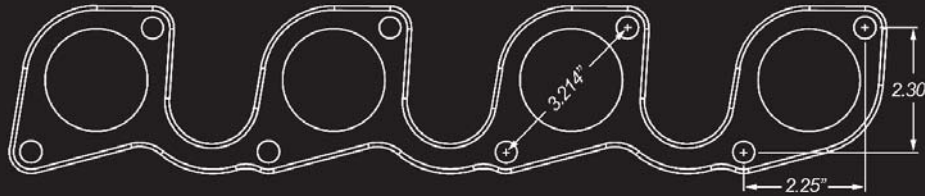
B837xx



Square	Part #	Size
	B83764	1.88"
	B83765	2.00"
	B83766	2.13"

Dart / Buick GM Performance

Brodix BD



C817xx



Round	Part #	Size
	C81724	1.88"
	C81725	2.00"
	C81726	2.13"

Brodix BD2000

Add *I* for Individual flanges

C819xx

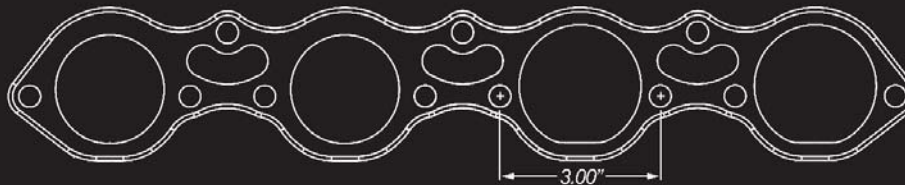


Round	Part #	Size
	C81924-I	1.88"
	C81925-I	2.00"

Brodix BD1010

Use individual flange only

Alan Johnson Billet SBC



C821xx



SAP	Part #	Size
	C82125	2.00"
	C82126	2.13"
	C82127	2.25"

AJPE Billet SBC

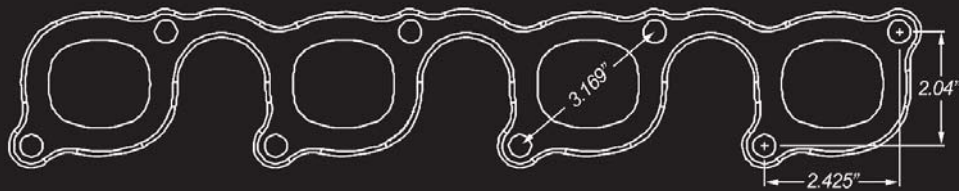
Alcohol / Nitro



	C82125B	2.00"
	C82126B	2.13"
	C82127B	2.25"

Add *I* for Individual flanges

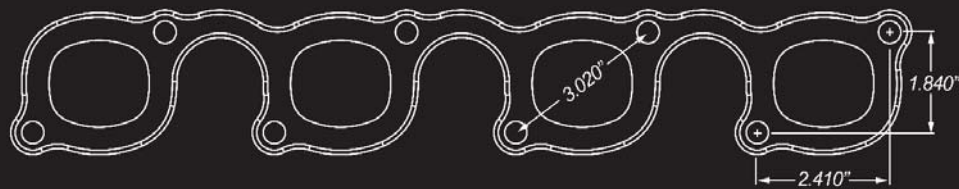
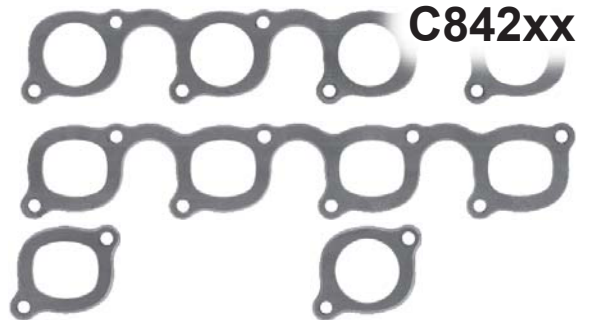
General Motors (SBC Splayed Valve)



Dart "Little Chief"
Reher-Morrison
Pattern

	C84224	1.88"	Round
	C84225	2.00"	
	C84226	2.13"	
Dart "Little Chief" Same as factory port	C84243	1.75"	Square Oval
	C84244	1.88"	
	C84245	2.00"	

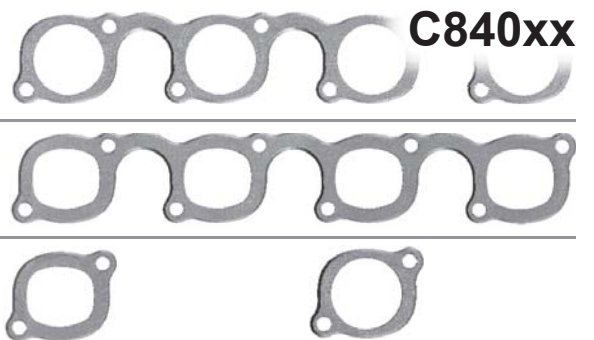
Add *I* for Individual flanges



CFE SBX

Counter Bored ▶	C84024	1.88"	Round
	C84025	2.00"	
	C84076	2.13"	
CFE "SBX" same as factory port	C84043	1.75"	Square Oval
	C84044	1.88"	
	C84045	2.00"	

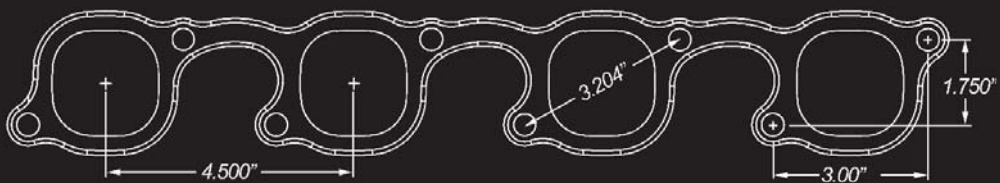
Add *I* for Individual flanges



**Assassin
4.5 Bore Center**

Same port size and shape as ported by Terrace Performance	C84555	2.00"	SAP
	C84556	2.13"	
	C84557	2.25"	

Add *I* for Individual flanges



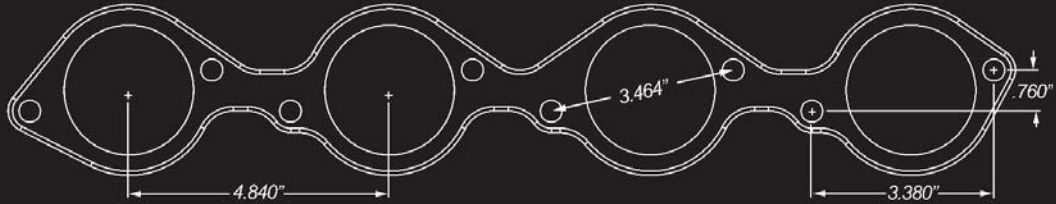
**R0X
4.5 Bore Center**

NEW!	C815255	2.00"	SAP
	C815256	2.13"	



GM (Big Block Chevy) 4.84" b.c.

Mark IV
396-572 ci



C850xx



Square	C85055	2.00"	Stock Cast Iron Heads
	C85056	2.13"	
	C85057	2.25"	Call for World Products Merlin

C851xx



Round	C85125	2.00"	Small Profile Flange
	C85126	2.13"	
	C85127	2.25"	Large Profile Flange
	C85128	2.38"	
	C85129	2.50"	

Add *I* for Individual flanges

C852xx



Canted Square	C85257	2.25"	Dart 320-360 / Olds 14 deg.
	C85258	2.38"	
	C85259	2.50"	

Add *I* for Individual flanges

C856xx



Round	C85626	2.13"	Brodix BB-2 Xtra
	C85627	2.25"	
Square	C85656	2.13"	CFE BMF 320
	C85657	2.25"	Same port shape as ported by CFE
	C85658	2.38"	

Add *I* for Individual flanges

C857xx



D-Port	C85734	1.88"	◀ GM Perf. NHRA Super Stock
	C85735	2.00"	
	C85736	2.13"	GM 502-572 Aluminum
	C85737	2.25"	Edlebrock Performer 454

Add *I* for Individual flanges

C8153xx



SAP	C815357	2.25"	NEW! 11 & 14 degree Big Chief
	C815358	2.38"	

Add *I* for Individual flanges

C8163xx



Counter-Bored	C816377-I	2.25"	NEW! AJPE Billet BBC
	C816378-I	2.38"	
	C816379-I	2.50"	

C8164xx



Oval	C816447	2.25"	NEW! Universal flange profile allows for small adjustments in port location to match cylinder head.
	C816448	2.38"	
	C816449	2.50"	

Add *I* for Individual flanges

C8166xx



Round	C816627	2.25"	NEW! Universal flange profile allows for small adjustments in port location to match cylinder head.
	C816628	2.38"	
	C816429	2.50"	

Add *I* for Individual flanges

GM Pro Stock - Pro Mod

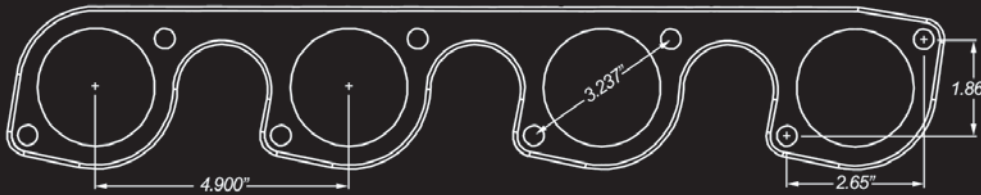


**BBC/Olds DRCE
4.84" Bore Center**

DRCE	C82627	2.25"	Round
Alan Johnson 481X	C82628	2.38"	
(use inverted for 481x)	C82629	2.50"	



C826xx



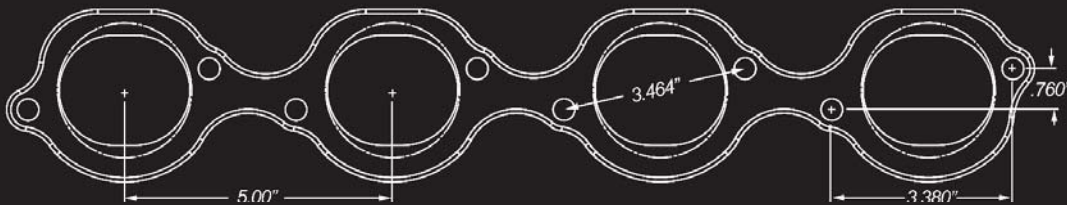
**BBC/Olds DRCE II
4.9" Bore Center**

DRCE II	C82827	2.25"	Round
Pro-Filer 165 (4.9" b.c.)	C82828	2.38"	
	C82829	2.50"	



C828xx

Pro-Filer 166 (5.0" b.c.) Add *I* for Individual flanges



**BBC
5.0 Bore Center
CFE 5.2 use individual**

Brodix PB5000	C85427	2.25"	Round
	C85428	2.38"	
	C85429	2.50"	

(see C851xx-I for Individual flanges)



C854xx

Sonny's & CFE / Fulton	C85527	2.25"	Round
Port center moved .180" left	C85528	2.38"	
	C85529	2.50"	

Add *I* for Individual flanges



C855xx

CFE 5.0	C816547	2.25"	Oval
Sonny's 5x13	C816548	2.38"	
	C816549	2.50"	

(see C8164xx-I for Individual flanges)



C8165xx

	C816727	2.25"	Round
	C816728	2.38"	
	C816729	2.50"	

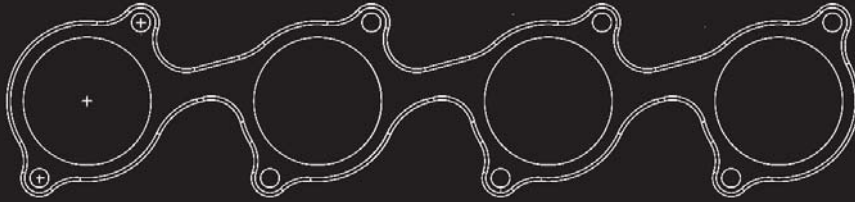
(see C8166xx-I for Individual flanges)



C8167xx

GM Pro Stock - Pro Mod

**Sonny's
Semi Hemi
5.0**

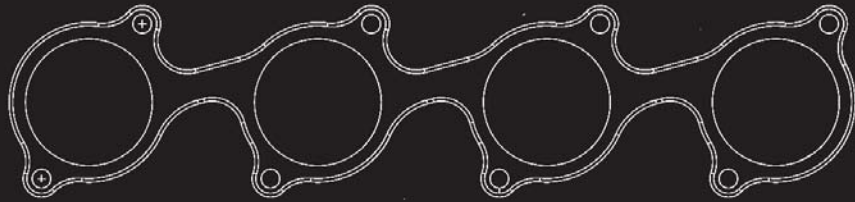


C8168211



Round	C8168211	2.75"	Semi Hemi
SAP	C8168510	2.63"	Port match to Sonny's port
Round	C8168211-I	2.75"	Semi Hemi
SAP	C8168510-I	2.63"	Port match to Sonny's port

**Sonny's
Semi Hemi
5.3**



C8169211



Round	C8169211	2.75"	Semi Hemi
SAP	C8169510	2.63"	Port match to Sonny's port
Round	<i>(see C8168211-I for Individual flanges)</i>		
SAP	C8168510-I	2.63"	Port match to Sonny's port

AJPE 5.0 Bore Center *Call for availability*

AJPE 5.3 Bore Center *Call for availability*

General Motors (Buick-Pontiac-Olds-Cadillac)



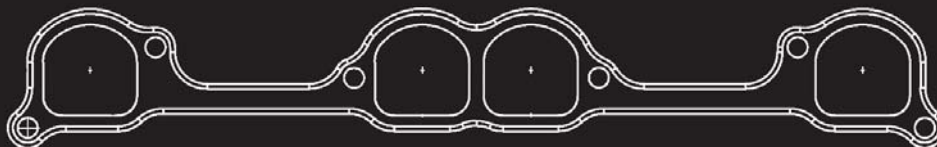
**Buick
Stage II V6**

Indy Buick/Menard V6 (85-96) B63964 1.88" **Square**
Nascar "Busch GN Div. (82-95) B63965 2.00"



Will Not Fit OEM Cast Iron Heads

Dart Buick V8 See pg. 30 (Small Block Chevy Splayed Valve)

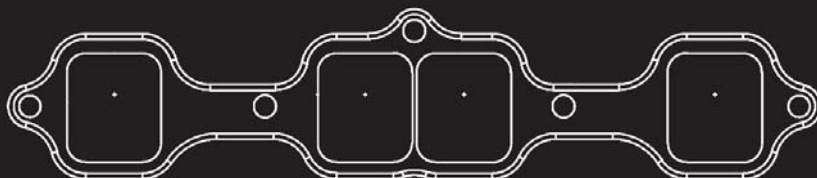


**Pontiac
Edelbrock**

Edelbrock P85833 1.75" **D-Port**
Performer & Performer RPM P85834 1.88"
P85835 2.00"
Will Not Fit OEM Cast Iron Heads P85836 2.13"



Pontiac 867 See pg. 27 (Small Block Chevy Stahl Pattern)



**Oldsmobile
Edelbrock**

Edelbrock O82764 1.88" **Square**
Performer RPM O82765 2.00"
Will Not Fit OEM Cast Iron Heads



See page. 33 (Big Block Chevy DRCE 4.84 & 4.90)

Olds DRCE



**Cadillac
Northstar**

93-Present Cadillac C816042 1.63" **Oval**
04-06 Pontiac Bonneville C816043 1.75"
04-Present Buick Lucerne C816044 1.88"
C816045 2.00"



.150" Counterbore C816074 1.88" **Counter-**
.150" Counterbore C816075 2.00" **bored**