

## 10°

## 18°

**NEW!**



**Raised Port 275 & 285 Intake Heads**

Engineered for the serious 5.0L racer, these highly sophisticated new 10° cylinder heads come with 275cc or humongous 285cc intake runners and monster 2.250" intake valves. They are the new king of the hill for Ford enthusiasts.

- Cast from 355-T6 aluminum alloy
- Six bolt-per-cylinder (matches Man O'War blocks)
- Available with 285cc or 275cc intake runners
- Utilizes 2.250" intake and 1.625" exhaust valves
- 64cc combustion chamber (smaller available)
- Compatible with OEM valve train components
- Valves and rocker arm studs parallel at 10°
- Offered bare or fully assembled

**NEW!**



**235/200cc Intake Street/Strip Heads**

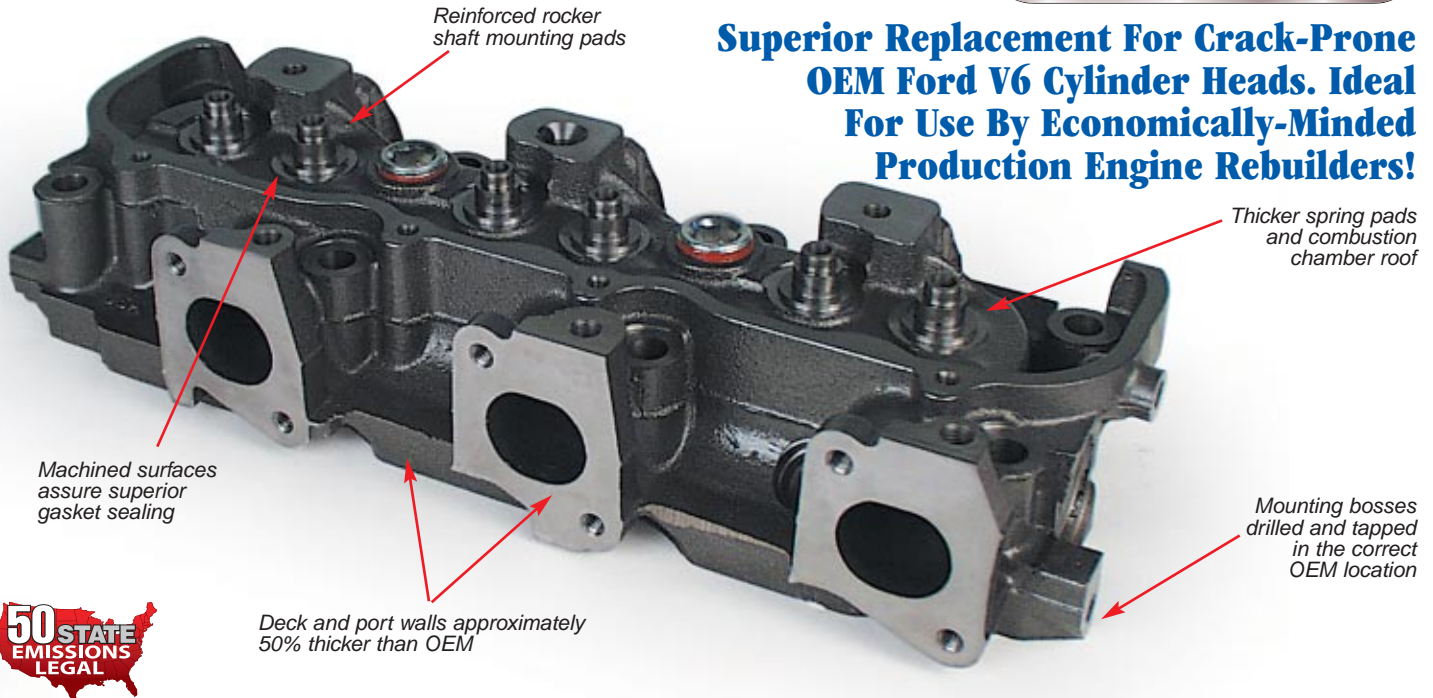
The ideal street/strip head, the new 18° Man O'War comes with 200cc or 235cc intake runners so you can have the optimum flow/velocity for your engine combination. A bolt-on power booster for stock or modified 302/351 Fords.

- Cast from 355-T6 aluminum alloy
- Standard Ford 4 bolts-per-cylinder attachment
- Available with 200cc or 235cc intake runners
- 200cc uses 2.020/1.600" valves; 235cc uses 2.100/1.625"
- 64cc combustion chamber
- Valves and rocker arm studs parallel at 18°
- Compatible with OEM valve train components
- Offered bare or fully assembled

### Man O'War Aluminum 302/351 Ford Cylinder Heads - 18° Valve Angle and 10° Valve Angle

Part #	Application	Des,	In,	Valve Dimensions	Spring Dia.	Chamber
<b>023005</b>	Bare Head	18 Degree	200cc	N/A	N/A	64cc
<b>023005-1</b>	Assembled Head	18 Degree	200cc	2.020 x 1.600	1.250 Single	64cc
<b>023005-2</b>	Assembled Head	18 Degree	200cc	2.020 x 1.600	1.437 Dual	64cc
<b>023005-3</b>	Assembled Head	18 Degree	200cc	2.020 x 1.600	1.550 Dual	64cc
<b>023010</b>	Bare Head	18 Degree	235cc	N/A	N/A	64cc
<b>023010-2</b>	Assembled Head	18 Degree	235cc	2.100 x 1.625	1.437 Dual	64cc
<b>023010-3</b>	Assembled Head	18 Degree	235cc	2.100 x 1.625	1.550 Dual	64cc
<b>023015</b>	Bare Head	10 Degree	285cc	N/A	N/A	64cc
<b>023015-2</b>	Assembled Head	10 Degree	285cc	2.250 x 1.625	1.437 Dual	64cc
<b>023015-3</b>	Assembled Head	10 Degree	285cc	2.250 x 1.625	1.550 Dual	64cc
<b>023012</b>	Bare Head	10 Degree	275cc	N/A	N/A	64cc
<b>023012-2</b>	Assembled Head	10 Degree	275cc	2.250 x 1.625	1.437 Dual	64cc
<b>023012-3</b>	Assembled Head	10 Degree	275cc	2.250 x 1.625	1.550 Dual	64cc

## Superior Replacement For Crack-Prone OEM Ford V6 Cylinder Heads. Ideal For Use By Economically-Minded Production Engine Rebuilders!



### World Replacement Heads Save Time & Money!

Why hassle with used heads that are just as likely to fail as they are to last through any warranty period? Smart PER's invest in World heads.

- Far superior to factory castings. Designed for optimum reliability.
- No core tracking. Or worrying about the condition of a core.
- Lower labor costs. No machining required. And everything fits.
- Priced lower than OEM parts. More profit for rebuilders.

Add to this the satisfaction of providing a superior product and being secure in the knowledge that customer satisfaction is assured. You can kiss "comebacks" goodbye with World 2.9 heads!

**Get "No Core" Replacement Heads For Chevrolets, Too!**



The factory cylinder heads used in many Ford Rangers, Broncos, and other vehicles have developed a reputation for cracking. The need was such that World developed these improved replacements for the original. World's **S/R 2.9 Ford V6** head also comes with reinforced shaft pads and hardened steel exhaust seats. All bolt holes and mounting bosses are exactly in the original location, plus precision drilled and tapped to ensure optimum ease of assembly. A recap of key features and benefits is as follows:

- Decks are approximately 50% thicker than factory castings
- Machined gasket surfaces assure improved sealing
- Port walls are approximately 50% thicker than stock
- Reinforced shaft mounting pads
- Thicker spring pads and combustion chamber roof
- Hardened steel exhaust valve seats are fully compatible with today's formulated unleaded gas

What's more, as an OEM replacement for Ford part #6090CAJ, World **S/R 2.9 Ford V6** heads are fully 50-state emissions legal. Because of the propensity for OEM Ford 2.9 heads to crack, it is highly advisable to replace them at rebuild—rather than put a lot of machining effort, parts and assembly labor into factory castings that are apt to fail at any time. Cost-conscious engine rebuilders will recognize that an investment in **S/R 2.9 Ford V6** heads will pay dividends by eliminating costly "comebacks."

**Port Walls Are 50% Thicker Than Stock To Eliminate Cracking**



**Combustion Chambers Have A Thicker Roof To Provide Improved Dependability!**



#### TECHNICAL SPECIFICATIONS

- Material:** High density cast iron
- Valve Seats:** Integral intake, hardened steel exhaust
- Valve Size:** 1.650" intake x 1.420" exhaust (OEM)
- Valve Guide:** 5/16" integral cast iron
- Accessory Flange:** Stock locations
- Included In Assembly:** OEM replacement steel valves, umbrella style valve seals, valve springs, OEM steel retainers and keepers.

#### Ford 2.9 V6

Part #	Description	Valves	Spring
052900	Replacement 2.9 Ford V6 (bare)	n/a	
052900-1	Replacement 2.9 Ford V6 assembly	1.650" x 1.420"	OEM

# WINDSOR JR/SR

## CAST IRON

Equipped with Manley Street-Flo RaceMaster or Severe Duty stainless steel valves

Leak-free fully machined valve cover rails

Screw-in rocker arm studs



Bolts on to 1987-94 Mustang engines with no loss of compression

Dual bolt pattern accommodates large custom headers

Exclusive Right Cast® technology assures optimum port accuracy

The Windsor series of cylinder heads come in both 180cc ("Jr.") and 200cc ("Sr.") models that combines high velocity and superior flow to produce excellent torque and throttle response in 5.0 engines, with the "Jr." being better suited to stock or slightly modified engines and the larger "Sr." heads, which have been designed in collaboration with leading Ford racers, are perfect for more serious performance applications. The 58cc combustion chamber is sized for true bolt on compatibility, and has been "tweaked" to optimize efficiency. World's Windsor-series cast iron cylinder heads provide a very cost-effective solution to getting serious power from a Ford 5.0 motor without spending a ton of money. And when it comes to value, you can't beat the assembly packages from World. Top grade components, like Manley stainless steel valves, are used as your assurance of reliability, with World passing bulk buying advantages right through to customers. They are 50-state emissions legal.

### TECHNICAL SPECIFICATIONS

**Material:** High density cast iron  
**Valve Seats:** Integral intake, hardened steel exhaust  
**Valve Guides:** Integral cast iron  
**Valve Spring Seats:** Machined for 1.250/1.550" springs (stepped)  
**Valve Size:** 1.940" (Windsor Jr.) or 2.020" (Windsor Sr.) x 1.600"  
**Rocker Arm Studs:** Accepts 7/16" screw-in studs  
**Exhaust Flange:** Stock port locations. Dual bolt pattern accommodates large custom headers

**Included In Base Assembly:** Manley Street Flo (-1 models), or RaceMaster (-2 models) forged stainless steel valves with swirl-polished heads, ring & band-style seals (-1/-2 models), valve springs, Manley 7° chrome moly retainers

#### Recommended Installation Items:

**Rocker Arms:** Aftermarket roller rocker arms recommended. However, if stock rockers are to be retained, use stud mounted rockers  
**Head Gaskets:** Fel-Pro #9333PT (or #1011-2) or equivalent. Caution: #1011-1 is NOT recommended.  
**Pushrods:** Requires heat-treated pushrods.  
**Spark Plugs:** Accepts 14mm .460" reach tapered seat 5/8" hex (Champion #670 or #802) or equivalent  
**Intake Gasket:** Fel-Pro #90361 or equivalent  
**Exhaust Gasket:** Fel-Pro #1415 or equivalent



**Highly Efficient High Swirl, Heart-Shaped Combustion Chamber**



**Right Cast® 180cc Or 200cc Intake Runners Are Perfect For 5.0s!**

### Windsor Jr. and Windsor Sr. Cast Iron Cylinder Heads For Small Block Ford (5.0)

Part #	Description	Intake	Cam	Valve Dimensions	Spring Specs	Max Lift	Chamber
053030	Windsor Jr. iron head	180cc	bare	bare	bare		64cc
053030-1	Windsor Jr. iron head	180cc	Hydraulic	1.94" x 1.600" 11/32	1.250" Single 100# Seat	.560"	64cc
053030-2	Windsor Jr. iron head	180cc	Solid/Hyd. Roller	1.94" x 1.600" 11/32	1.437" Dual 125# Seat	.600"	64cc
053040	Windsor Sr. iron head	200cc	bare	bare	bare		64cc
053040-1	Windsor Sr. iron head	200cc	Hydraulic	2.02" x 1.600" 11/32	1.250" Single 100# Seat	.560"	64cc
053040-2	Windsor Sr. iron head	200cc	Solid/Hyd. Roller	2.02" x 1.600" 11/32	1.437" Dual 125# Seat	.600"	64cc