

SciTEX LLC

TRICK **TITANIUM**

Use What The Pros Use

**Valves
Wrist Pins
Bellhousings
Spring Retainers
Connecting Rods**

**QUALITY
EXPERIENCE
DEDICATION
PERFORMANCE**



2046 Depot Street Building B - Holt, Michigan 48842
www.TrickTitanium.com

ABOUT US

Trick Capabilities

The team at Trick Titanium is dedicated to providing you with the highest quality, most reliable titanium racing components on the market today. Mike Miller, Managing Director and President of Trick Titanium, acquired Trick Titanium in 2008 from founder Regis Gully. Mr. Miller has merged Trick Titanium with Stealth Engineering & Technologies under the same Trick Titanium name. Mr. Miller founded Stealth Engineering & Technologies in 1992, combining his experience in exotic alloy manufacturing and automobile racing to manufacture superior titanium engine components. The products in this catalog are the result of the Trick team mission and dedication to products that withstand the rigors of NASCAR, NHRA, IHRA, World Of Outlaws and Sportsman Racing.

Proprietary Information

Trick has developed relationships with some of the leading race teams, engine builders and cylinder head manufacturers in the racing industry. Each of these customers has unique designs that are proprietary to them. We hold this information in the strictest of confidence. We maintain a print library of over 2000 component part designs that are unique to our customers. Your design information is proprietary to you. You have our word on it!!

At SciTex Trick Titanium, our ***Promise*** to you is: ***“Unparalleled quality and service to assure our customers receive the best possible product.”***

AUTOCAD & Unigraphics Engineering Services

The Trick team of AutoCAD and Unigraphics certified design engineers have developed years of expertise and understanding, interpreting intricate geometric shapes into complete precise workable prints using AutoCAD and Unigraphics solid modeling techniques.

Coating Technologies

At Trick, we appreciate the difference in our customers' needs and requirements, by offering a variety of solutions. We are constantly exploring new coating technologies for improved wear and durability. Trick has partnered with the coating industry's finest companies to offer an assortment of coatings. Trick focuses on what the customer wants; a highly durable and long running product. We offer performance enhancement coatings such as thermal and plasma sprayed, DLC, and nitride coatings to address all your needs.

Precision CNC Machining

Trick utilizes a diverse arsenal of the most advanced computer aided CNC turning centers, 3 axis CNC machining centers, centerless grinding and micro finishing equipment. With over 25 years of automotive race component experience we pride ourselves on our ability to repeatedly hold precise tolerances.



TITANIUM BELLHOUSING

The Standard in Racing

Trick Titanium's bellhousings are the gold standard for safety and weight reduction in all forms of racing today.

With twenty years of field experience, Trick Titanium is the bellhousings of choice for every major professional Top Fuel, Funny Car, Pro-Mod and Pro-Stock team in America.



Trick's precision titanium bellhousings have been proven time and again to withstand the most severe failure possible while protecting the driver and spectators.

NHRA Top Fuel and Funny Car teams all use Trick Titanium Bellhousing. When we say "run what the pro's run", we mean it. Bellhousings are produced to rigid to SFI specifications; 6.1, 6.2, and 6.3. All bellhousings are custom tailored to each individual client's specifications.

Titanium Bellhousing Sizes

6.1 Spec—Pro Stock

includes 1 set (12) cover bolts = 6 for I.M. cover, 6 for adj. cover

7-1/2

8-1/8

8-5/8 – Sport Compact

6.3 Spec-Pro Mod

includes 1 set (18) cover bolts = 12 for I.M. cover, 6 for adj. cover

7-1/2

8-1/8

8-5/8

6.2 Spec-Top Fuel, Alcohol

includes 2 liners and 1 set (18) cover bolts = 12 for I.M. cover, 6 for adj. cover

7-1/2

8-1/8

8-5/8

9-5/8 (9.40)

CUSTOM BELLHOUSINGS AVAILABLE UPON REQUEST

ALUMINUM BELLHOUSING

The Standard in Racing

Trick Titanium now offers an affordable alternative to its world renowned titanium bellhousing. It's an aerospace grade aluminum bellhousing made from 6061 T6 aluminum. These aluminum bellhousings are made with the same exacting precision as Trick's titanium bellhousings. The aluminum bellhousings are offered in the SFI 6.1 and 6.3 specification and will be offered in the proposed SFI 6.4 Spec.



Trick's bellhousings have long been the gold standard for safety and weight reduction in all forms of racing. With twenty years of field experience Trick takes its know how to the aluminum bellhousing market. Resulting in an affordable alternative to titanium, made with the same care as the bellhousings used by every professional drag racing team in the world. So, if you every felt you couldn't afford to "run what the pro's run" you might be surprised at how affordable aluminum bellhousings can be. Call us today to discuss a new Trick Aluminum 6.3 or 6.1 bellhousing made to your custom specifications.

Aluminum Bellhousing Sizes

6.1 Spec-Pro Stock

includes 1 set (12) cover bolts = 6 for I.M. cover, 6 for adj. cover

7-1/2

8-1/8

8-5/8 – Sport Compact

6.3 Spec-Pro Mod

includes 1 set (18) cover bolts = 12 for I.M. cover, 6 for adj. cover

7-1/2

8-1/8

8-5/8

CUSTOM BELLHOUSINGS AVAILABLE UPON REQUEST

RUN WITH TRICK TITANIUM

Bellhousing Accessories...

Clutch Stand

Our Big Foot Clutch Stands are constructed from aerospace grade titanium and then coated with moly-graphite using a buttress style thread to withstand the excessive pressures experienced and the hostile environment in which they live.

Our clutch stands can be adjusted for your needs.

Large Clutch Stand

Overall Height Closed – 4.955"

Overall Height Open Max – 5.625"

Small Clutch Stand

Overall Height Closed – 2.190"

Overall Height Open Max – 2.875"



Collar

Candlestick - 1 3/8" Input Shaft

Candlestick - 1 1/2" Input Shaft

Clutch Fork

Steel clutch fork.

Cross Shaft Fork – Standard Length



Cross Shafts

We offer 2 different types of splined cross shafts for your clutch setup –

4130 Steel Cross Shaft - .875" Diameter - 16.00" Overall Length – 48 Splined -

.750" Spline Length – 822 Grams/1.812 lbs

4340 Lightweight Steel Cross Shaft – .875" Diameter - 16.00" Overall Length – 48 Splined -

.750" Spline Length – 584 Grams/1.287 lbs



RUN WITH TRICK TITANIUM

Bellhousing Accessories...

Throw-Out Bearings

Cross Shaft Throw out Bearings for your clutch setup.

We offer three different sizes to accommodate your specific setup.

Cross Shaft Throw Out Bearing – Short – 1 3/8"

Cross Shaft Throw Out Bearing – Short – 1 1/2"

Cross Shaft Throw Out Bearing – Medium – 1 3/8"

Cross Shaft Throw Out Bearing – Medium – 1 1/2"

Cross Shaft Throw Out Bearing – Long – 1 3/8"

Cross Shaft Throw Out Bearing – Long – 1 1/2"

Cross Shaft Arm

Cross Shaft Arm – Multiple linkage holes for varying lengths



Starter Dog

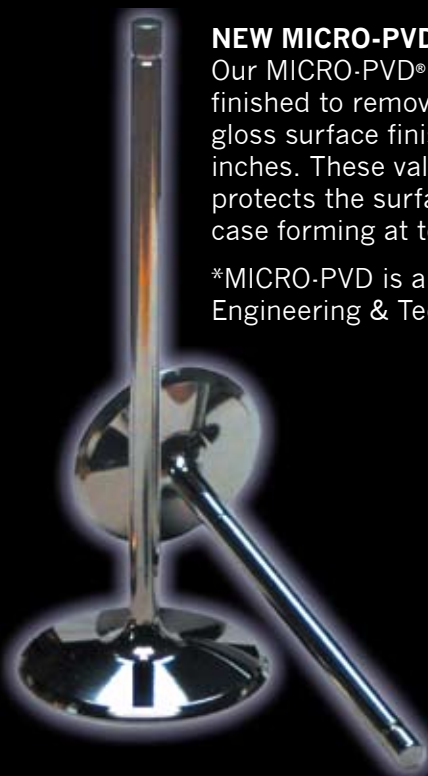
This light weight aerospace titanium replacement for your starter dog is forty percent lighter than steel. It replaces the standard starter dog used on most external starter applications.



TITANIUM VALVES

Intake and Exhaust

Our precision and expertise assures our products are manufactured to the highest standards. Trick's manufacturing process imparts superior material strength into each valve we make. You can be assured the highest quality, most pure materials go into a Trick Titanium Valve. All materials are strengthened with a Trick proprietary heat treat and annealing process. This what makes our valves so tough. Nobody knows titanium like we do.



NEW MICRO-PVD® Valve

Our MICRO-PVD® Valve surfaces are super finished to remove stress risers and create a high gloss surface finish. All surfaces RA 4 max micro inches. These valves have a PVD coating that protects the surfaces from oxidation and alpha case forming at temperatures up to 1650° F.

*MICRO-PVD is a registered trademark of Trick Engineering & Technologies (patent pending)



Ti 6242.2 Si High Temperature Silicon Impregnated Valve Alloy

High Temperature Alloy can withstand repeated thermal cycles over time and is specifically designed to handle punishing exhaust temperatures.

Simply Perfection

Trick's titanium raw materials are tested and certified for chemical purity, uniform grain microstructure, and superior mechanical properties and sonically tested to be imperfection free.

Precision CNC machined

Maximum run out tolerances of less than .0015". True consistent head tolerances allow for easy seat grinding and installation. Precision Centerless ground stems. Maximum 12 Ra finish. Stem diameter held to +/- .0001" Tolerances consistently held with every valve out of the box.

Trick-Kote 2 High Temperature Nickel Chrome Molybdenum Stem Coating

High integrity coating offering excellent valve guide lubricity and high temperature durability. Twice the bond strength as traditional valve stem coatings. Hardened steel tip inserts where required. Excellent valve tip wear properties. All valves are surface polished and Tech-Solv cleaned before packaging. Valve surfaces are polished free of machine lines and cleaned of contaminants.

Laboratory Tested

MTI laboratory tested for structural integrity after hundreds of severe miles of testing at Pocono, Indy and Michigan with flawless results. Total confidence that Trick Titanium Valves can withstand the rigors of NASCAR, NHRA, IHRA, WORLD OF OUTLAWS and SPORTSMAN RACING.

Fit Notes

Lash caps are required for non-steel tipped valves. Do not use lash caps on steel tipped valves. Recommended minimum valve to guide clearance for intake valves .0008" to .001" and for exhaust valves is .0012" to

.0015". Normal valve to guide clearance for intakes .0013" to .0015" and for exhaust valves .0015" to .0017". Proper honing of valve guides to eliminate taper is most important for minimum valve to guide clearances. Bead lock dimensions vary between

valve manufacturers. Trick stock valves come with bead grooves compatible with Manley locks. Del West and other bead lock designs are easily available on request.

CN VALVES

Chromium Nitride Intake and Exhaust

Many new things have been happening here at SciTex Trick Titanium over the past year. One of the product lines that we are very excited about is our CN Titanium Valves. With the integration of Stealth Engineering & Technologies comes a line of high quality titanium valves that have been used by race teams around the globe over the past 15 years. When Trick Titanium's Engineering, Design, & Sales team came together, they wanted to offer a product that would give racers a boost in performance but soften the blow to the check book. The CN Titanium Valve was the result.



Chromium Nitride Coating

- Greater surface hardness and smoothness increases valve durability
- Chromium Nitride strengthens the valve's entire surface—not just the wear characteristics of the stem
- Better ductility under the hard nitride layer makes the valve less likely to break, even if contacted by the piston
- Resists corrosion and deposits caused by exotic fuels

What is the difference between the high-end valves and the CN Valves? The CN Valves are manufactured using a superalloy, and coated entirely with a Chromium Nitrate coating, while the high end valves are made using a special high temperature alloy, and have a Trickote 2 coated stem. The CN valves are currently made without an inserted steel tip (Steel tips are an upgrade). Using a CN Titanium Valve in your engine versus a stainless steel valve can typically give you a 40% weight reduction in your valve weight. This results in a lighter valve train that increases your engines RPM range drastically. If you're looking to get more out of your engine and not sure where it's going to come from, the CN Titanium Valve can bring your engine to the next level in performance while keeping more money in your wallet.

Intake Valves

Titanium

Intake Valves

Part No.	Head Ø	Overall Length
TTI2020-2TR	2.020"	5.140"
TTI2055-1TR	2.055"	5.040"
TTI2055-2TR	2.055"	5.140"
TTI2080-1TR	2.080"	5.040"
TTI2080-2TR	2.080"	5.140"
TTI2080-3TR	2.080"	5.240"
TTI2100-2TR	2.100"	5.140"
TTI2100-3TR	2.100"	5.240"
TTI2100-3TRSVO	2.100"	5.285"
TTI2100-4TR	2.100"	5.340"
TTI2100-5TR	2.100"	5.440"
TTI2100-6TR	2.100"	5.540"
TTI2125-2TR	2.125"	5.140"
TTI2125-3TR	2.125"	5.240"
TTI2125-4TR	2.125"	5.340"
TTI2125-5TR	2.125"	5.440"
TTI2125-6TR	2.125"	5.540"
TTI2150-2TR	2.150"	5.140"
TTI2150-3TR	2.150"	5.240"
TTI2150-4TR	2.150"	5.340"
TTI2150-5TR	2.150"	5.440"
TTI2150-5TRSVO	2.150"	5.485"
TTI2150-6TR	2.150"	5.540"
TTI2150-6TRPR	2.150"	5.540"
TTI2150-7TR	2.150"	5.640"
TTI2180-5TR	2.180"	5.440"
TTI2180-6TR	2.180"	5.540"
TTI2180-6TRPR	2.180"	5.540"
TTI2180-7TR	2.180"	5.640"
TTI2180-8TR	2.180"	5.740"
TTI2200-5TR	2.200"	5.440"
TTI2200-6TR	2.200"	5.540"

Big Block Intake Valves

Part No.	Head Ø	Overall Length
TTI2250-BB	2.250"	5.250"
TTI2250-1BB	2.250"	5.350"
TTI2250-2.5BB	2.250"	5.500"
TTI2250-3.5BB	2.250"	5.600"
TTI2300-BBC	2.300"	5.500"
TTI2300-TBBC	2.300"	5.540"
TTI2400-BIGCHIEF	2.400"	6.600"
TTI2400-TBIGCHEIF	2.400"	6.640"

Top Fuel, Funny Car, TAD & TAFC 11/32" Stem - .250 Tip Length

Part No.	Head Ø	Overall Length
TTE2000-FC	2.000"	5.020"
TTI2375-1FC	2.375"	5.600"
TTI2400-1FC	2.400"	5.600"
TTI2400-2FC	2.400"	5.700"

5/16" Stem Intake Valves

Part No.	Head Ø	Overall Length
TTI2100-3TRSVO5/16	2.100"	5.285"
TTI2150-6TR5/16	2.150"	5.540"
TTI2150-7TR5/16	2.150"	5.640"
TTI2180-6TR5/16	2.180"	5.540"
TTI2180-7TR5/16	2.180"	5.640"
TTI2180-7TRPR5/16	2.180"	5.640"
TTI2180-8TRPR5/16	2.180"	5.740"

Chromium Nitride

Intake Valves

Part No.	Head Ø	Overall Length
TTICN2055-1TR	2.055"	5.040"
TTICN2080-1TR	2.080"	5.040"
TTICN2080-2TR	2.080"	5.140"
TTICN2100-2TR	2.100"	5.140"
TTICN2100-3TR	2.100"	5.240"
TTICN2100-3TRSVO	2.100"	5.285"
TTICN2125-4TR	2.125"	5.340"
TTICN2125-6TR	2.125"	5.540"
TTICN2150-3TR	2.150"	5.240"
TTICN2150-5TR	2.150"	5.440"
TTICN2150-5TRSVO	2.150"	5.485"
TTICN2150-6TR	2.150"	5.540"
TTICN2150-6TRPR	2.150"	5.540"
TTICN2180-6TR	2.180"	5.540"
TTICN2180-6TRPR	2.180"	5.540"
TTICN2180-7TR	2.180"	5.640"
TTICN2180-8TR	2.180"	5.740"
TTICN2200-5TR	2.200"	5.440"
TTICN2200-6TR	2.200"	5.540"

Big Block Intake Valves

Part No.	Head Ø	Overall Length
TTICN2300-BBC	2.300"	5.500"
TTICN2300-TBBC	2.300"	5.540"
TTICN2400-BIGCHIEF	2.400"	6.600"
TTICN2400-TBIGCHEIF	2.400"	6.640"

5/16" Stem Intake Valves

Part No.	Head Ø	Overall Length
TTICN2100-3TRSVO5/16	2.100"	5.285"
TTICN2180-7TR5/16	2.180"	5.640"
TTICN2180-7TRPR5/16	2.180"	5.640"
TTICN2180-8TRPR5/16	2.180"	5.740"

Exhaust Valve Titanium and Chromium Nitride

Titanium

Standard features:

High Temperature Alloy
Precision CNC machined
Trick-Kote 2 stem coating
Hardened Steel Tip

Stem 7mm (.2754)

(Call for sizes)

Stem 5/16" (.3100)

Keeper Groove: Radius
Seat Angle/Width: 45/.100"
Margin: .080"
Tip Length: .290" with steel tip.
Face: Flat or Dished

Stem 11/32" (.3415)

Keeper Groove: Standard Square or radiused
Seat Angle/Width: 45/.100"
Margin: .080"
Tip Length: .290" with steel tip.
Face: Flat or dished

Exhaust Valves 11/32 Stem

Part No.	Head Ø	Overall Length
TTE1600-1TR	1.600"	5.040"
TTE1600-2TR	1.600"	5.140"
TTE1600-3TR	1.600"	5.240"
TTE1600-4TR	1.600"	5.340"
TTE1600-5TR	1.600"	5.440"
TTE1600-6TR	1.600"	5.540"
TTE1600-6TR25A	1.600"	5.540"
TTE1600-7TR	1.600"	5.640"
TTE1600-7TR25A	1.600"	5.640"
TTE1625-1TR	1.625"	5.040"
TTE1625-2TR	1.625"	5.140"
TTE1625-4TR	1.625"	5.340"
TTE1625-5TR	1.625"	5.440"
TTE1625-6TR	1.625"	5.540"
TTE1625-6TR25A	1.625"	5.540"
TTE1625-7TR	1.625"	5.640"
TTE1625-7TR25A55S	1.625"	5.640"
TTE1625-8TR	1.625"	5.740"
TTE1625-8TR25A	1.625"	5.740"
TTE1650-2TR	1.650"	5.140"
TTE1650-2TR25A	1.650"	5.140"

Big Block Intake Valves

Part No.	Head Ø	Overall Length
TTE1840-BB	1.840"	5.440"
TTE1880-BB	1.880"	5.440"
TTE1900-BBC	1.900"	5.440"
TTE1900-TBBC	1.900"	5.480"
TTE1900-TBIGCHIEF	1.900"	6.490"

Chromium Nitride

Standard features:

Super Alloy
CrN Coating
Precision CNC machined
No Hardened Tip (Lash Cap Required)
Options: Dished Face, Multiple Back Cut Angles, Radiused Groove, Custom Sizes.

Stem 11/32" (.3415)

Keeper Groove: Radius
Seat Angle/Width: 45/.080"
Margin: .075"
Tip Length: .250"
Face: Flat

Exhaust Valves

Part No.	Head Ø	Overall Length
TTECN1600-2TR	1.600"	5.140"
TTECN1600-3TR	1.600"	5.240"
TTECN1600-4TR	1.600"	5.340"
TTECN1600-6TR	1.600"	5.540"
TTECN1600-6TR25	1.600"	5.540"
TTECN1600-7TR	1.600"	5.640"
TTECN1600-7TR25	1.600"	5.640"
TTECN1625-5TR	1.625"	5.440"
TTECN1625-6TR	1.625"	5.540"
TTECN1625-6TR25	1.625"	5.540"
TTECN1625-7TR	1.625"	5.640"
TTECN1625-7TR25S55	1.625"	5.640"
TTECN1625-8TR	1.625"	5.740"

Big Block Exhaust Valves

Part No.	Head Ø	Overall Length
TTECN1900-BBC	1.900"	5.440"
TTECN1900-TBBC	1.900"	5.480"
TTECN1900-TBIGCHIEF	1.900"	6.490"

Import/Domestic Valves

MAKE	Engine Code	Type	Models
CHEVROLET			
TTI-CH-LS1	LS1	INTAKE	Pontiac - GTO - 04'
TTE-CH-LS1		EXHAUST	Corvette - 97'-04'
DODGE			
TTI-DO-A85	A855	INTAKE	SRT-4 03'-05'
TTE-DO-A85	A853	EXHAUST	PT Cruiser GT + Turbo - 03'-08'
HONDA			
TTI-HO-B16	B16	INTAKE	Civic Si - 99'-00'
TTE-HO-B16		EXHAUST	
TTI-HO-B18	B18	INTAKE	Del Sol VTEC - 94'-97'
TTE-HO-B18		EXHAUST	Integra GS-R - 94'-01'
			Integra RS/LS/GS - 90'-93'
			Integra - 94'-01'
TTI-HO-B18 C5	B18 C5	INTAKE	Integra GS-R, Type R 94'-01'
TTE-HO-B18 C5		EXHAUST	
TTI-HO-K20	K20	INTAKE	Acura RSX Type S 2001+
TTE-HO-K20		EXHAUST	Civic Si 2002+
MITSUBISHI			
TTI-MI-4G63	4G63	INTAKE	Evo 7,8,9 - 03'-08'
TTE-MI-4G63		EXHAUST	Eclipse - 95'-99'
			Eclipse - 90'-94'
NISSAN			
TTE-NI-SR20DET		INTAKE	Silvia - 91-93', 95'-96', 98'-02'
		EXHAUST	
SUBARU			
TTI-SU-EJ25X	EJ257, EJ255	INTAKE	Impreza WRX STI 2.5L - 04'-07' WRX 06'-07'
TTE-SU-EJ25X		EXHAUST	
TTI-SU- EJ20X	EJ207, EJ205	INTAKE	Impreza WRX 2.0L- 02'-05'
TTE-SU-EJ20X		EXHAUST	

Along with our latest line of import/domestic valve spring retainers, we are proud to introduce to you our high performance steel valve line. These valves are made from high quality steel with Trick back angles and stem undercuts which fit in your OEM setup while receiving the performance gains of after-market steel valves. You read right, these fit in your current engine with no need to go out and buy all new valve locks, retainers, or valve guides. Trick's valve material has been successfully run in the most severe race applications for years, and now we are bringing these high quality engine specific valves to the import/domestic market. Trick's exhaust valves are made out of a super alloy designed to withstand the highest exhaust temperatures that your turbo charged engine can throw at it and then some. This super alloy's ability to withstand extreme exhaust temperatures will far outlast any other standard stainless steel exhaust valve. This is a new line of products that we are very excited about and know that they will make a difference in your engine's performance.

All valves can be manufactured in titanium and are available upon request

SPRING RETAINERS

Super 7, 10° and Custom Retainers

Trick has been manufacturing spring retainers for over 25 years. Trick Titanium retainers have had multiple wins in all three major venues of NASCAR with NO Failures.

Our titanium alloy is a premium grade military spec alloy. Extremely durable, machined to exacting tolerances and available in stock and custom sizes. The old saying goes, “a chain is only as strong as it’s weakest link.” This is so true of your valve train. Don’t ignore this part in your valve train set up-it can make all the competitive difference!



Fit Notes

Retainer to spring fit should be a snug slip fit. We recommend a .005 clearance between retainer step OD and spring ID.

Aerospace Grade Titanium Alloys

We use both Ti17 & Ti 64 for the manufacturing of our spring retainers for excellent strength and wear resistance at 40% less weight than steel retainers.

Precision CNC Machined

Precise tolerances held for consistent installation.

Stock & Custom Programs

We stock many common sizes and can turn around custom orders fast and reasonably priced.

Simply Perfection

Trick’s titanium raw materials are tested and certified for chemical purity, uniform grain microstructure, and superior mechanical properties and sonically tested to be imperfection free.

Custom Designs

Trick can produce any size retainer to the spring dimensions you use. Just call us with the your spring’s brand name and part number and we will take care of the rest. Use our enclosed blank print form to add any additional information you would like us to consider in the design. If you have a target weight we can design the retainer to come as close to you weight with out compromising durability. More than 80 percent of the titanium spring retainers we produce are custom proprietary designs for our customers.

High Volume Distributor Program

Trick offers a “High Volume Program” for manufacturers and parts distributors looking for the best price possible. Minimum order quantities are required. Call for details.

Titanium Retainers

	Retainer/Spring	Valve Stem	A	B	C	D
TT23553C	10°/1.660" Triple +.100"	11/32", 5/16"	1.430"	1.185"	.860"	.620"
TT23640C	10°/1.625" Dbl. +.100"	11/32", 5/16"	1.500"	1.175"	.850"	
TT23648C	10°/1.58"-1.61" Dbl. +.100	11/32", 5/16"	1.500"	1.150"	.825"	
TT23650C	10°/1.550" Double +.100	11/32", 5/16"	1.500"	1.140"	.740"	
TT23653C	10°/1.660" Triple +.100"	11/32", 5/16"	1.500"	1.185"	.860"	.620"
TT23654C	10°/1.625" Double	11/32", 5/16"	1.500"	1.175"	.765"	
TT23655C	10°/1.625" Dbl. +.100"	11/32", 5/16"	1.500"	1.175"	.765"	
TT23661C	10°/1.550" Dbl. +.100"	11/32", 5/16"	1.500"	1.120"	.705"	
TT23630C	10°/1.437"-1.550"	11/32", 5/16"	1.440"	1.050"	.700"	
TT23658C	10°/1.550"	11/32", 5/16"	1.500"	1.105"	.710"	
TT23662C	10°/1.625" +.100" Triple	11/32", 5/16"	1.500"	1.190"	.875"	.640"
TT510C	Super 7°/Dual Springs	11/32", 5/16"	1.500"	1.120"	.730"	
TT510C-LTW	Super 7°/Dual Springs	11/32", 5/16"	1.450"	1.120"	.730"	
TT515C	Super 7°/Dual Springs	11/32", 5/16"	1.500"	1.140"	.745"	
TT515C-LTW	Super 7°/Dual Springs	11/32", 5/16"	1.450"	1.140"	.745"	
TT525C	Super 7°/Dual Springs	11/32", 5/16"	1.500"	1.130"	.810"	
TT526C-LTW	Super 7°/Dual Springs	11/32", 5/16"	1.350"	1.065"	.775"	
TT529C-LTW	Super 7°/Dual Springs	11/32", 5/16"	1.450"	1.155"	.765"	
TT530C	Super 7°/Dual Springs	11/32", 5/16"	1.495"	1.155"	.835"	
TT530C-LTW	Super 7°/Dual Springs	11/32", 5/16"	1.450"	1.155"	.835"	
TT535C-LTW	Super 7°/Dual Springs	11/32", 5/16"	1.420"	1.146"	.828"	
TT540C-LTW	Super 7°/Dual Springs	11/32", 5/16"	1.375"	1.085"	.795"	
TT550C	Super 7°/Dual Springs	11/32", 5/16"	1.500"	1.180"	.775"	
TT550C-LTW	Super 7°/Dual Springs	11/32", 5/16"	1.450"	1.180"	.775"	
TT560C	Super 7°/Dual Springs	11/32", 5/16"	1.575"	1.185"	.889"	.679"
TT565C-LTW	Super 7°/Dual Springs	11/32", 5/16"	1.450"	1.185"	.870"	.635"
TT721C	10°/1.500"-1.550"	11/32", 5/16"	1.500"	1.100"	.710"	
TT727C	10°/1.500"-1.550" Dbl	11/32", 5/16"	1.500"	1.120"	.745"	
TT728C	10°/1.250" Single	11/32", 5/16"	1.240"	.870"	.735"	
TT730C	10°/1.437"-1.500" Dbl.	11/32", 5/16"	1.437"	1.065"	.700"	
TT731C	10°/1.500"-1.550" Dbl.	11/32", 5/16"	1.437"	1.100"	.800"	
TT732C	10°/1.500"-1.550"	11/32", 5/16"	1.500"	1.110"	.710"	
TT733C	10°/1.625" Double	11/32", 5/16"	1.500"	1.180"	.765"	
TT735C	10°/1.625"	11/32", 5/16"	1.500"	1.180"	.870"	.635"
TT736C	10°/1.500"-1.550" Triple	11/32", 5/16"	1.500"	1.135"	.835"	.635"
TT738C	10°/1.500"-1.550" Dbl.	11/32", 5/16"	1.500"	1.120"	.730"	
TT739C	10°/1.625" Triple	11/32", 5/16"	1.500"	1.180"	.870"	.635"
TT785C	10°/1.585"	11/32", 5/16"	1.150"	.725"		
TT788C	7°/1.055"	11/32"	1.030"	.640"		
TT794C	Beehive Style	11/32"	1.300"	1.050"	.640"	

Import/Domestic Retainers

MAKE	Engine Code	Models
CHEVROLET		
TTR-CH-LS1	LS1	Pontiac - GTO - 04' Corvette - 97'-04'
TTR-CH-LS2	LS2	Pontiac - GTO - 05'-06' Cadillac CTS-V 06'-07' Corvette - 05'-07' SSR - 05'-06'
TTR-CH-LS3	LS3	TrailBlazer SS - 06'-09' Saab 9-7X - 08'-09' Corvette 08'-09' Camaro SS - 10'
TTR-CH-LS6	LS6	Pontiac G8 GXP - 09' Corvette C5 Z06 01'-04' Cadillac CTS-V 04'-05'
TTR-CH-LS7	LS7	Corvette Z06 - 06'-10'
TTR-CH-LNF	LNF	Cobalt SS - 08'-10'
DODGE		
TTR-DO-A85	A855 A853	SRT-4 03'-05' PT Cruiser GT + Turbo - 03'-08'
TTR-DO-LAGENII	LA SERIES	Viper 96'-02'
TTR-DO-6G72	6G72	3000 GT VR-4 - 91'-99' Stealth - 03'
HONDA		
TTR-HO-B16	B16	Civic Si - 99'-00'
TTR-HO-B18	B18	Del Sol VTEC - 94'-97' Integra GS-R, Type R - 94'-01' Integra RS/LS/GS - 90'-93' Integra - 94'-01'
TTR-HO-H22	H22	Prelude VTEC - 97'-01' Prelude VTEC + Type SH - 92'-96' Prelude Type S - 97'-01' Prelude Si (JDM) Accord SiR (JDM) - 94'-97'
TTR-HO-K20	K20	Acura RSX Type S 2001+ Civic Si 2002+ Acura RSX 2001+
TTR-HO-K24	K24	Acura TSX - 04'-08'
TTR-HO-D16	D16	Civic EX, DX Acura Integra - 86'-89' Civic Si, CRX Si, Civic Wagon RT4WD - 88'-91' Civic Si - 92'-95' Civic EX - 90'-95'
TTR-HO-F22	F22	S2000 - 04'-09'
TTR-HO-F20	F20	S2000 - 99'-03'
MITSUBISHI		
TTR-MI-4G63	4G63	Lancer Evolution - 03'-08' Eclipse - 95'-99' Eclipse - 90'-94'
NISSAN		
TR-NI-VQ35DE	VQ35DE	350z - 05'-06'
TTR-NI-KA24DE	KA24DE	240SX - 95'-98'
TTR-NI-SR20DE	SR20DE	180SX - 91'-92', 94'-97' Infiniti G20 - 91'-02' Sentra - 91'-94', 98'-01'
TTR-NI-SR20DET	SR20DET	Silvia - 91'-93', 95'-96', 98'-02''
SUBARU		
TTR-SU-EJ205	EJ205	Impreza WRX- 02'-05'
TTR-SU-EJ257	EJ257	Impreza WRX STI - 04'-07' WRX 06'-07'

Trick Titanium has been manufacturing and supplying valve spring retainers to every form of racing and high performance application for over three decades. As a leader in the market Trick Titanium is releasing our latest line of import/domestic valve spring retainers. Our new line of Import/Domestic engine model specific spring retainers are CNC machined to exacting tolerances to fit your current OEM parts (springs, valves, keepers). By replacing your stock retainer with titanium not only are you reducing the weight of the valve train, you are also improving the follow up response of the cam lobe at higher RPM's thus increasing your engines RPM range. In this exciting market, Trick Titanium will be there for all your valve train needs.

Import Kits

MAKE	Engine Code	Models
HONDA		
TTR-HO-B16	B16	Civic Si - 99'-00'
TTR-HO-B18	B18	Del Sol VTEC - 94'-97'
		Integra GS-R, Type R - 94'-01'
		Integra RS/LS/GS - 90'-93'
		Integra - 94'-01'
TTR-HO-H22	H22	Prelude VTEC - 97'-01'
		Prelude VTEC + Type SH - 92'-96'
		Prelude Type S - 97'-01'
		Prelude Si (JDM)
		Accord SiR (JDM) - 94'-97'
TTR-HO-K20	K20	Acura RSX Type S 2001+
		Civic Si 2002+
		Acura RSX 2001+
TTR-HO-K24	K24	Acura TSX - 04'-08'
TTR-HO-D16	D16	Civic EX, DX
		Acura Integra - 86'-89'
		Civic Si, CRX Si, Civic Wagon
		RT4WD - 88'-91'
		Civic Si - 92'-95'
		Civic EX - 90'-95'
TTR-HO-F22	F22	S2000 - 04'-09'
TTR-HO-F20	F20	S2000 - 99'-03'
MITSUBISHI		
TTR-MI-4G63	4G63	Lancer Evolution - 03'-08'
		Eclipse - 95'-99'
		Eclipse - 90'-94'
TTR-MI-6G72	6G72	3000 GT VR-4 - 91'-99'
NISSAN		
TTR-NI-VQ35DE-VQ35DET	VQ35DE/VQ35DET	350z - 05'-06'
TTR-NI-KA24DE	KA24DE	240SX - 95'-98'
TTR-NI-SR20DE-SR20DET	SR20DE/SR20DET	Silvia - 91'-02'
SUBARU		
TTR-SU-EJ205	EJ205	Impreza WRX- 02'-05'
TTR-SU-EJ257	EJ257	Impreza WRX STI - 04-07
		WRX 2006-2007
DODGE		
TTR-DO-A853	A853	SRT-4 03'-05'
		PT Cruiser GT + Turbo - 03'-08'

Looking for that next level in your engines performance? Then look no further than our valve spring and titanium retainer kits. Using springs that are manufactured from our super clean alloy and designed to handle aftermarket camshafts with revs up to 10,000 RPM's; these springs will get you well on your way to a race performance engine. Not only will you feel the increased performance from your engine, you are gaining the reliability of titanium retainers that are CNC machined to exact tolerances for reduced wear and high fatigue strength.

NBC ONE VALVE SEATS

Non-Beryllium Copper Alloy Valve Seats

The development of PVD coatings on titanium valve seats created a new challenge for cylinder head developers. The ultra hard PVD coated surface of the valve seat was demolishing the standard soft valve seat materials found in performance cylinder heads. Beryllium enhanced seats worked better, but nobody wants to deal with the dangers

of working with

Beryllium. Through

research and

development

Trick

found the

substitution

for

Beryllium

copper.

We call it

NBC ONE

(non-beryllium

copper one)

Nickel and silicone

have replaced the Beryllium

to create a hard wearing highly heat

conductive copper alloy material.



**Recommended with MICRO-PVD valves*

What Makes our NBC ONE Valve Seats Better?

Beryllium Free copper alloy enhanced with nickel and silicone for wear toughness.

Excellent Thermal conductivity.

Highly compatible with PVD and DLC seat coatings.

Nickel and silicone enhanced for toughness against our MICRO-PVD coating. As the engine is initially run a nikasil type matrix forms on the seat surface. The nickel silicon matrix is very hard, but it is comparatively ductile. The copper composition of the seat acts as cushion to deter valve bounce.

Custom sizes are no problem.

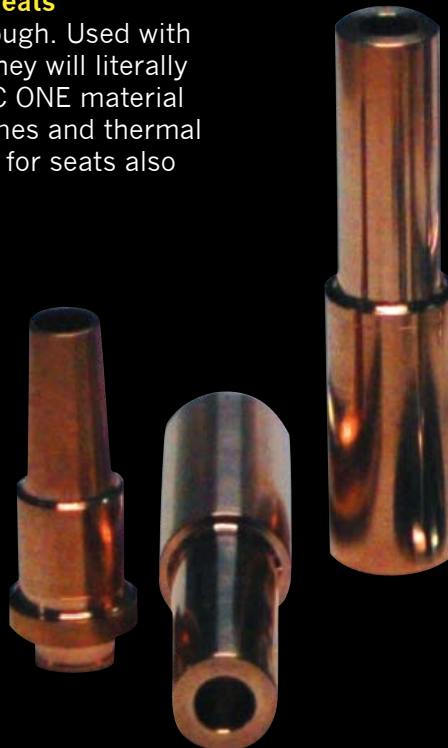
High thermal conductivity,
High Hardness, resistance to corrosion and wear.

Manufactured to customer specifications

NBC ONE VALVE GUIDES

Non-Beryllium Copper Valve Seats

PVD valve stem coatings are tough. Used with inferior valve guide materials they will literally "take out" the guides. Our NBC ONE material is the answer. The same toughness and thermal conductivity that make it great for seats also works for guides.



**Recommended with MICRO-PVD valves*

What Makes our NBC ONE Valve Guides Better?

Beryllium Free copper alloy enhanced with nickel and silicone for wear toughness.

Excellent Thermal conductivity.

Highly compatible with PVD and DLC seat coatings.

Nickel and silicone enhanced for toughness against our MICRO-PVD coating. As the engine is initially run a nikasil type matrix forms on the seat surface. The nickel silicon matrix is very hard, but it is comparatively ductile. The copper composition of the seat acts as cushion to deter valve bounce.

Manufactured to customer specifications

KEEPER LOCKS

Our “minimum gap” titanium valve locks are designed to hold the valve stem with maximum surface area and minimum gap. We offer a .020” gap between the lock halves that allows for maximum purchase without lock binding. Available in bead lock design only in assorted

installation heights for all stock valve stems.



*Only made in bead design

What Makes our “Minimum Gap” Valve Locks Better?

Made from premium grade Ti 6/4.

Precision CNC machined, EDM split, polished and deburred.

Minimum gap “no bind” design allows for maximum valve purchase.

Custom sizes are no problem.

Bead design offers the most reliable design for valve durability and retainer grip.

Assorted installation heights for retainer installation flexibility

Need a finished rod? Trick has teamed up with the performance racing industries leading rod manufacturers to offer you not only premium forgings, but precision design and assembly of titanium rods. Contact us for a recommended titanium rod supplier.

Lash Caps

4130 alloy steel

Black Oxide Coated

Hardened

Adds .060” to OAL of valve setup



Sizes

.3110” (5/16”) Stem Lash Caps

.3415” (11/32”) Stem Lash Caps

Sold in sets of 8 and 16

WRIST PINS

DLC Coated

In drag racing or endurance racing you have one goal. Be the fastest! Every engine builder's goal is to reduce engine reciprocating weight. Trick Titanium wrist pins with the DLC coating offer up to a 40% weight reduction over stock steel pins. We use Ti 17 exclusively in our wrist pin applications for its proven performance and increased durability over Ti 6-4. We have made an exhaustive effort to find the right blend of material and coating technologies to meet your needs. DLC is a carbon-silicon-diamond like coating that offers outstanding wear characteristics and hardness. It is the real deal!

*Wrist pins automatically include chamfered wear rings for use in pistons containing C-Clips. To specify pins without wear rings, make a note in the comment section of your order.



Premium Grade Solution Heat-Treated Alloy

40% lighter than steel. Extremely stiff titanium alloy with excellent durability. Wrist pins available in C300 for extreme applications, please call.

Precision CNC Machined and Centerless Ground

Precise tolerances held to +/- .0001" Trick Micro-finishing Roundness held to 30-50 millionths high gloss, smooth finish to Ra 1-3.

Dlc Coating

Extremely hard, slippery thin coating prevents galling and creates a durable wear coating.

Tooled Steel Wear Rings Option

Used in all endurance applications or drag applications with round wire lock.

Tapered Or Straight Wall Design

Options available specific to your application.

Simply Perfection

Trick's titanium raw materials are tested and certified for chemical purity, uniform grain microstructure, and superior mechanical properties and sonically tested to be imperfection free.

Fit Notes

Steel and titanium rods must have bushing on small end. Pin-to-piston and pin-to-rod fit tolerances should be slightly greater than steel pins and of .001"-.0015" range.

CONNECTING RODS

We offer 4 stock sizes of titanium connecting rods designed to fit a broad range of uses from smallest power sport applications to the most robust big block applications.

All Trick rods are produced from the most advanced titanium alloys developed for their exceptional strength and durability. Our proprietary heat treatments impart tremendous mechanical properties, stable microstructures and smooth machinability.



TRICK TITANIUM

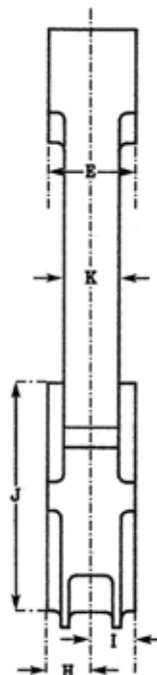
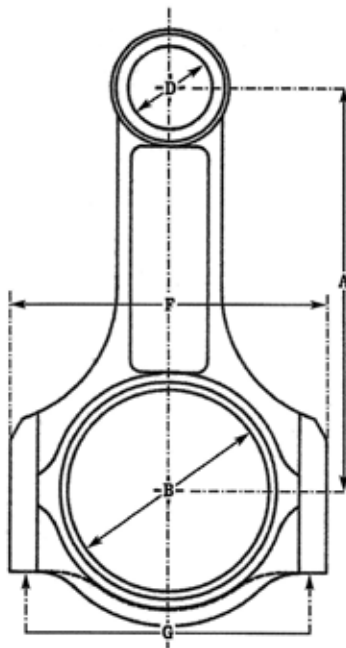
Quantity Desired: _____

- I-Beam H-Beam
 4340 Steel 94 Series Titanium
 FAX COMPLETED PRINT TO: 517-694-7590
 EMAIL: SCITEX@TrickTitanium.com

Measurement in inches or millimeters

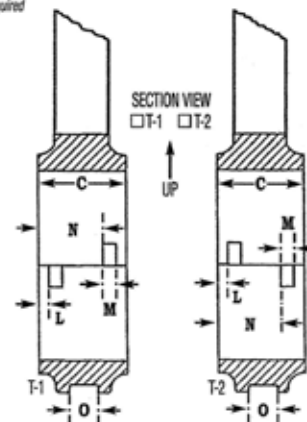
Previous W.O. No.: _____
 Customer: _____
 Company: _____
 Address: _____
 Phone: _____
 Fax: _____
 Email: _____

Engine Make: _____
 No. of Cylinders: _____
 Cylinder Bore Size: _____
 Target Weight: _____
 Max RPM: _____
 Max Horsepower: _____
 Turbo/Boost: _____ p.s.i./bar
 Nitrous Oxide: _____ HP Shot

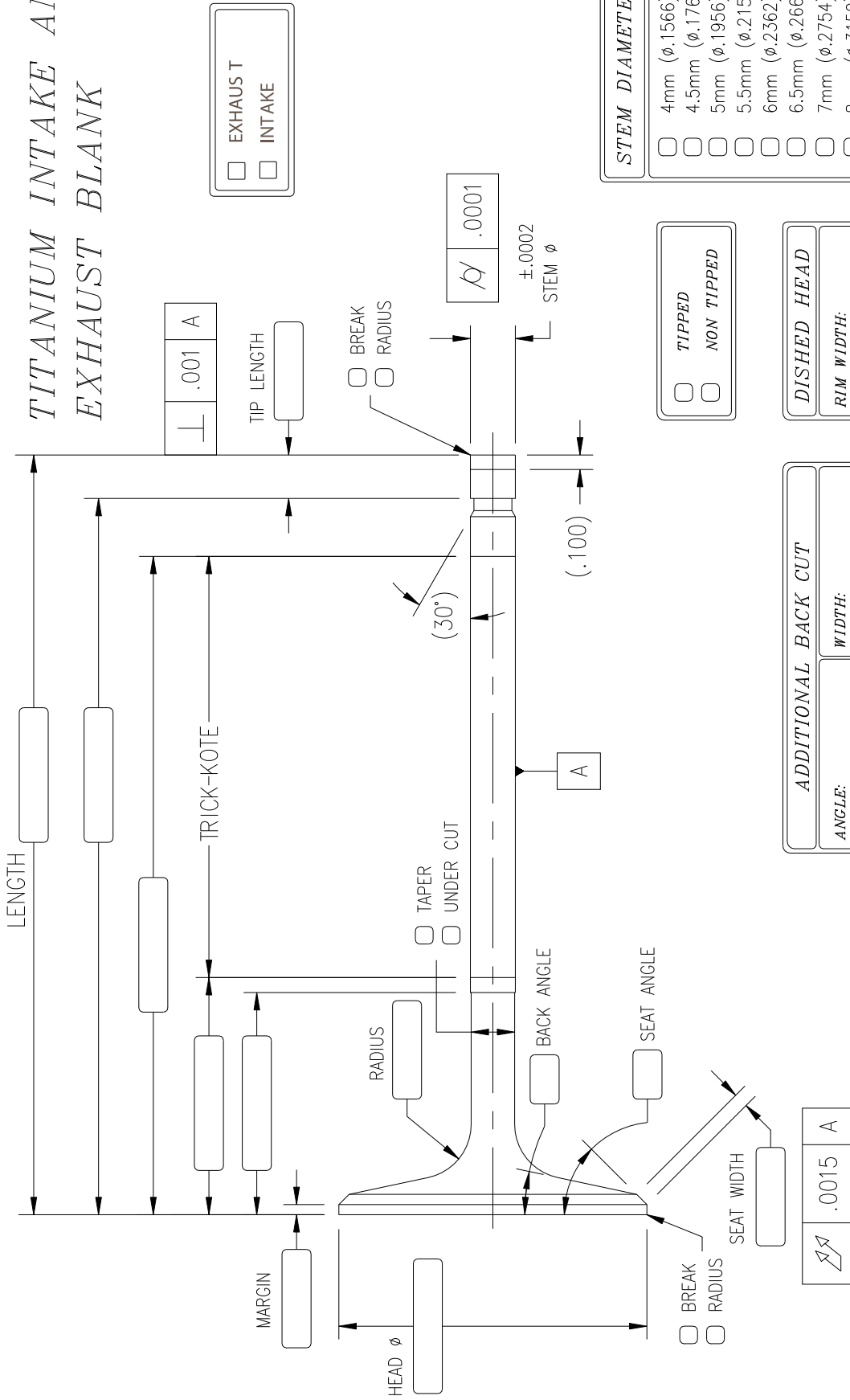


- A.* _____ Center to Center Length
- B.* _____ Big End Housing Bore
- C.* _____ Big End Width
- D.* _____ Pin End Bore
- E.* _____ Pin End Width
- F. _____ Overall BE Width
- G. _____ Bolt to Bolt Width
- H. _____ BE Offset
- I. _____ PE Offset
- J. _____ Big End Ring Diameter
- K. _____ Beam Width
- L. _____ Tang Positioning
- M. _____ Tang Width
- N. _____ Tang Dimension
- O. _____ Rib to Rib Width

*Required



TITANIUM INTAKE AND EXHAUST BLANK



<input type="checkbox"/>	EXHAUST
<input type="checkbox"/>	INTAKE

STEM DIAMETER	
<input type="checkbox"/>	4mm (φ.1566)
<input type="checkbox"/>	4.5mm (φ.1766)
<input type="checkbox"/>	5mm (φ.1956)
<input type="checkbox"/>	5.5mm (φ.2156)
<input type="checkbox"/>	6mm (φ.2362)
<input type="checkbox"/>	6.5mm (φ.2660)
<input type="checkbox"/>	7mm (φ.2754)
<input type="checkbox"/>	8mm (φ.3150)
<input type="checkbox"/>	5/16 (φ.3100)
<input type="checkbox"/>	5/16 HOLLOW
<input type="checkbox"/>	11/32 (φ.3415)
<input type="checkbox"/>	3/8 (φ.3715)

<input type="checkbox"/>	TIPPED
<input type="checkbox"/>	NON TIPPED

DISHED HEAD	
RIM WIDTH:	
DEPTH:	
ANGLE:	
RADIUS:	

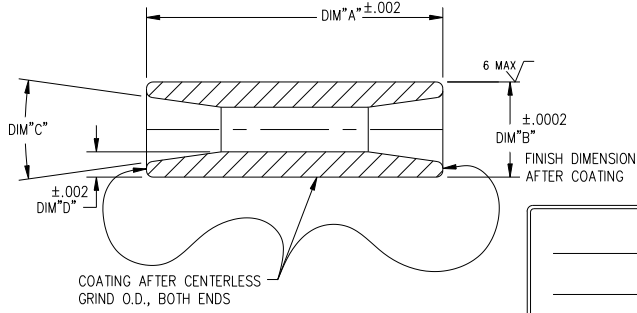
ADDITIONAL BACK CUT	
ANGLE:	
WIDTH:	
ANGLE:	
WIDTH:	
ANGLE:	
WIDTH:	

NOTE:
 1. FINISHED STEM CENTERLESS GROUND RA 15 MAX
 2. STEEL TIPPED VALVES REQUIRE MINIMUM .280 TIP LENGTH



KEEPER LOCK: STANDARD CHEVY MANLEY BEAD DEL WEST BEAD ALL OTHER LOCK TYPES PLEASE SPECIFY
 CUSTOMER _____ PART NO. _____ QTY _____ DATE _____

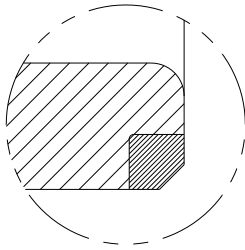
TITANIUM WRIST PIN BLANK



- STANDARD PIN
DRAG APPLICATIONS
- LOCK BLOCK EAR RING
ENDURANCE APPLICATIONS

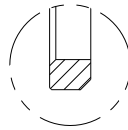
- _____ DIM "A" OAL
- _____ DIM "B" O.D.
- _____ DIM "C" TAPER/STRAIGHT
- _____ DIM "D" WALL THICKNESS
- _____ COATING

LOCK BLOCK WEAR RING

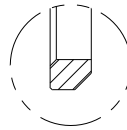


VIEW A
SCALE 5:1

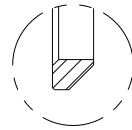
SPIRAL LOCK
.025 X 45° CHAM



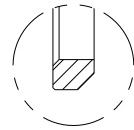
WIRE LOCK
.040 X 45° CHAM



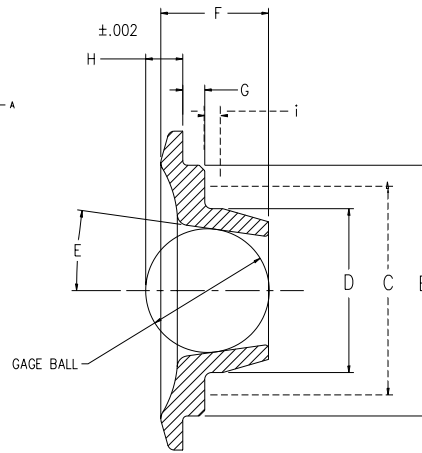
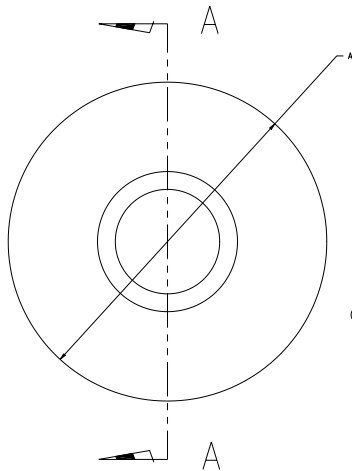
WIRE LOCK
.060 X 45° CHAM



OTHER
____ X 45° CHAM



CUSTOMER: _____ PART NO: _____
DATE: _____ QTY: _____ MAT'L: _____



SECTION A-A

SPRING & RETAINER INFORMATION

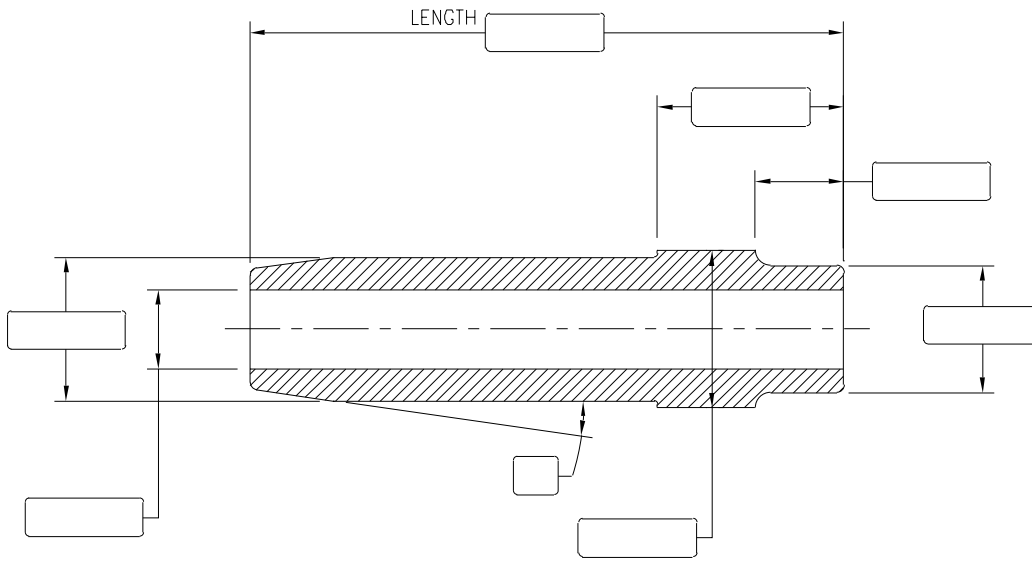
A	RETAINER O.D.-
B	FIRST STEP O.D.-
C	SECOND STEP O.D.-
D	COLLET O.D. -
E	I.D. CONE ANGLE-
F	RETAINER HEIGHT-
G	STEP THICKNESS-
H	GAGE BALL TO FIRST STEP (INSTALL HEIGHT) -
i	STEP THICKNESS-

TARGET WEIGHT
GRAMS:

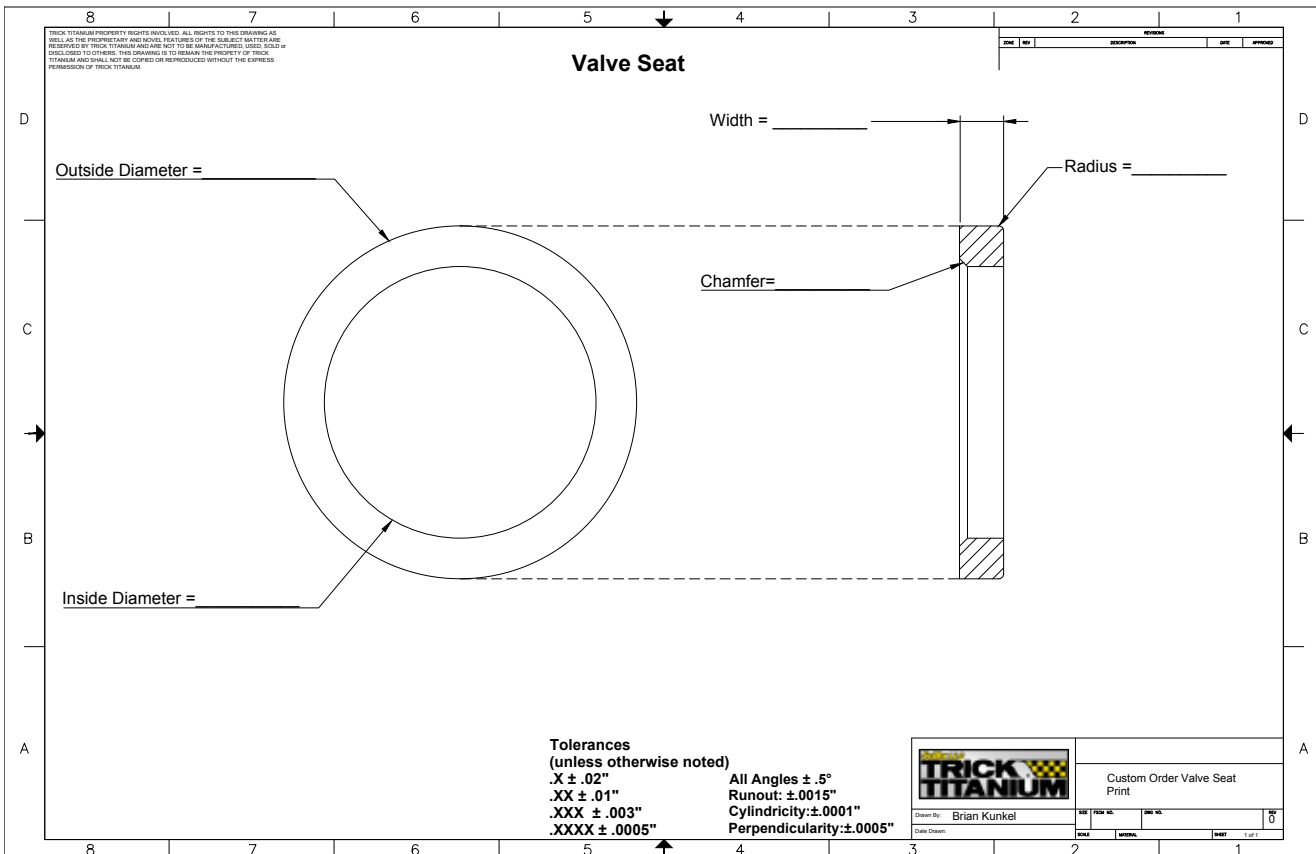
CUSTOMER _____ PART NO. _____



VALVE GUIDE



CUSTOMER _____ PART NO. _____ QTY _____ DATE _____



TRICK ACCESSORIES

Hats

Catching too many rays of sunlight at the track? Eyes need some shade from the long hours spent at the track? Then maybe it is time for you to get a very stylish Trick Titanium hat. Available in standard black and the always eye catching "Trick Yellow". Adjustable one size fits most.



T-Shirts

These Trick Titanium T-Shirts were designed for the racer and the race fan alike. Racing T-Shirts have always been full of color and unique designs that stand out in a crowd. We have embraced this long tradition with our latest line of Trick Titanium Racing T-Shirts.

Key Chains

A one of a kind key chain that you won't find anywhere else is available here at Trick Titanium. These key chains sport a high end finish CNC titanium retainer so that your keys will always be styling and always feel at home with this very important engine component. And not only that but the key chain will also be light; it is made out of titanium!



Decals

Wanna make a statement when you're driving down the road in your sweet ride that says "I Run What The Pros Run"? Then you need to sport a Trick Titanium decal.



Mouse Pads

A Trick Titanium mouse pad is always a nice addition not only to your mouse but also to your shop, office, or even your sales desk. The 6"x7-3/4" mouse pad gives you plenty of room to slide around while surfing the net and getting work done.



SciTex LLC

TRICK  
TITANIUM

**2046 Depot Street Building B
Holt, MI, 48842**

Phone: 517 -694-7449

Fax: 517-694- 7590

www.TrickTitanium.com