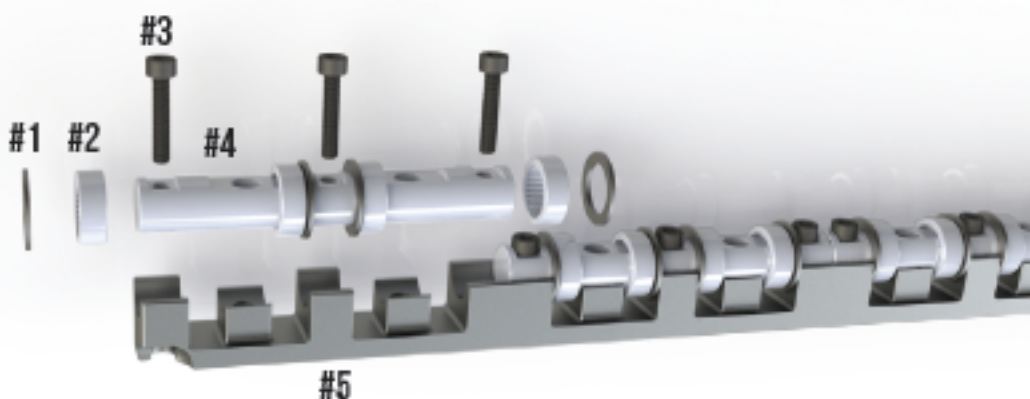


# V2 SHAFT ROCKER KIT

## PACKING LIST & INSTRUCTIONS

ID#	NAME	DETAILS	QTY
1	THRUST WASHER	RETAINING RINGS FOR ROCKER ARM	34
2	ROLLER BEARING	PRESS-IN ROLLER BEARINGS FOR ROCKER ARM	32
3	SHAFT BOLT	RETAINING BOLT TO HOLD SHAFT TO STAND	24
4	ROCKER SHAFT	62 100 BEARING STEEL ROCKER SHAFT	8
5	ROCKER STAND	CNC MACHINED STEEL ROCKER STAND	2
* 6	ROCKER BOLT	REPLACEMENT ROCKER BOLTS	16

\* BOLTS SOLD SEPARATELY



## QUESTIONS & TECHNICAL ASSISTANCE:

**CALL: 888.959.8865** MONDAY-FRIDAY 9-5:30PM (EST)

**EMAIL: SALES@BRIANTOOLEYRACING.COM**

**WWW.BRIANTOOLEYRACING.COM**

# ROCKER ASSEMBLY

**NOTE: IF YOU ARE UNCLEAR ON ANY OF THESE STEPS, PLEASE CONSULT A PROFESSIONAL INSTALLER. PROPER SAFETY PRECAUTIONS ARE ADVISED DURING THE ASSEMBLY PROCESS. BE AWARE OF ALL PINCH POINTS WITH YOUR EQUIPMENT, AS WELL AS WEARING ADEQUATE EYE PROTECTION. SAFETY FIRST!**



**TOOLS NEEDED:  
1/2" DRIVE 22MM & 13MM SOCKET  
BENCH VICE OR PRESS  
SNAP RING PLIERS**



**STEP 1:  
LOCATE THE FLAT SIDE OF YOUR ROCKER ARM**



**STEP 2:  
PLACE THE ROCKER FLAT SIDE DOWN CENTERING  
THE OEM BEARING INSIDE THE OPENING OF THE  
22MM SOCKET. PLACE THE 13MM SOCKET ON  
THE CENTER OF THE BEARING FROM ABOVE  
SANDWICHING THEM BETWEEN YOUR PRESS**



**STEP 3:  
GENTLY PRESS THE 13MM SOCKET INTO THE OEM  
ROCKER, EFFECTIVELY PUSHING OUT THE OEM  
BEARING. IMAGE ABOVE SHOWS THE 13MM  
PRESSED INTO THE ROCKER AS DESCRIBED.**

***\*\*KEEP THESE PIECES STRAIGHT. DAMAGE TO ROCKER ARM  
BODY CAN OCCUR IF THIS IS MISALIGNED\*\****

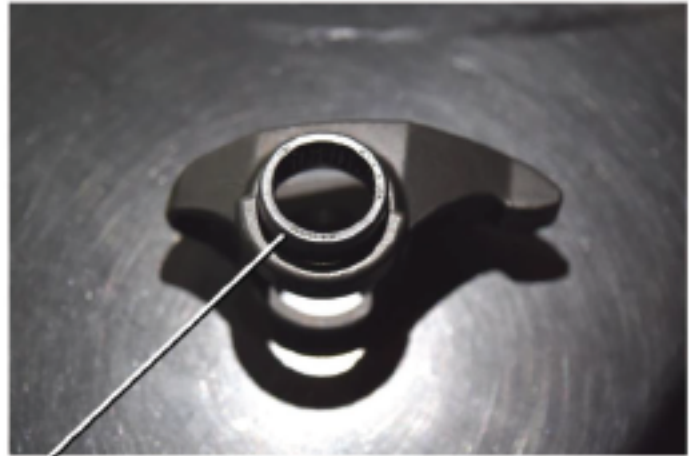
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### STEP 4:

RELEASE THE PRESS AND REMOVE THE 13MM SOCKET. YOU'LL SEE THE OEM BEARING HAS BEEN SUCCESSFULLY PRESSED FREE FROM THE ROCKER.

*\*IF THE OEM BEARING ISN'T FREE FROM THE ROCKER ARM, DOUBLE CHECK THAT THE ALIGNMENT OF THE ROCKER ARM WASNT COMPROMISED DURING STEP 3.*



### STEP 5:

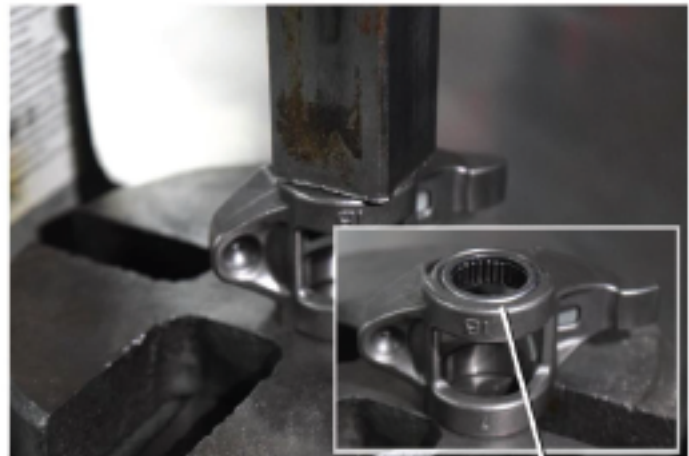
PLACE ONE ROLLER BEARING (PART ID #2) ON TOP OF THE ROCKER WITH THE WRITING SIDE FACING OUTWARD. CENTER THE BEARING WITHIN THE ROCKER ARM OPENING.



### STEP 6:

PLACE THE ROCKER ARM IN THE PRESS. MAKE SURE THE ROLLER BEARING IS SQUARE & CENTERED WITH THE ROCKER ARM OPENING.

ENSURE THAT YOUR PRESS SURFACE IS SMOOTH AND WONT DAMAGE THE INNER BEARING.



### STEP 7:

PRESS THE INNER BEARING UNTIL IT IS FLUSH WITH THE OUTSIDE EDGE OF THE ROCKER ARM.

REMEMBER, THE WRITING MUST FACE OUTWARD

REPEAT THESE STEPS FOR BOTH SIDES OF ALL 16 ROCKERS.



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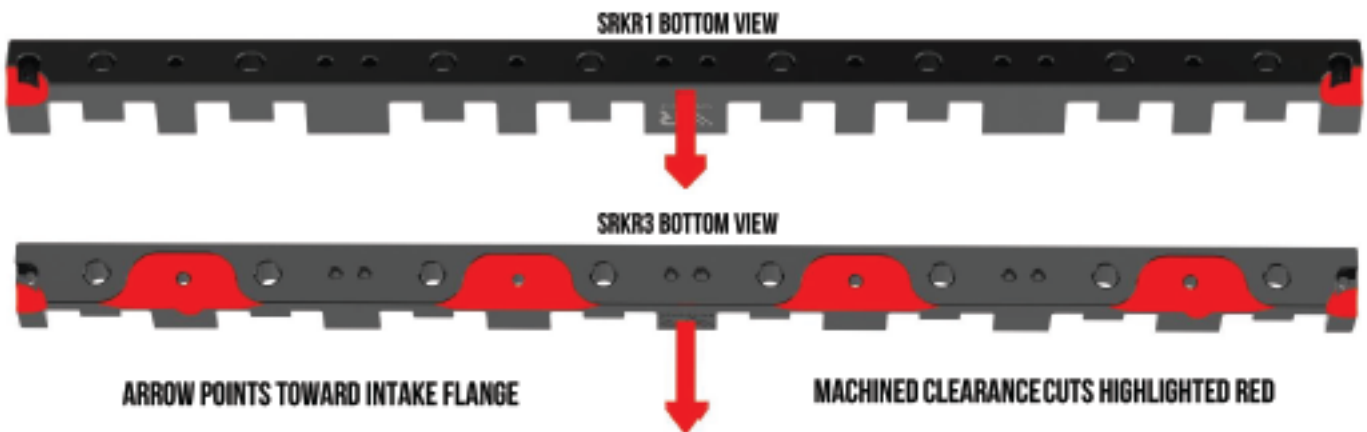
## STEP 8:

USING A SMALL AMOUNT OF OIL OR LUBRICANT ON THE ROCKER SHAFT, SLIDE TWO THRUST WASHERS TO THE CENTER OF THE SHAFT NEAR THE MIDDLE SOCKET HEAD BOLT HOLE



## STEP 9:

ORIENT THE SHAFT SO THAT THE FULL ROUND, SMOOTH SIDE IS FACING UP. THIS WILL SUPPORT THE BEARING NEEDLES DURING THE INSTALLATION OF THE SHAFT INTO THE ROCKER.



## STEP 10:

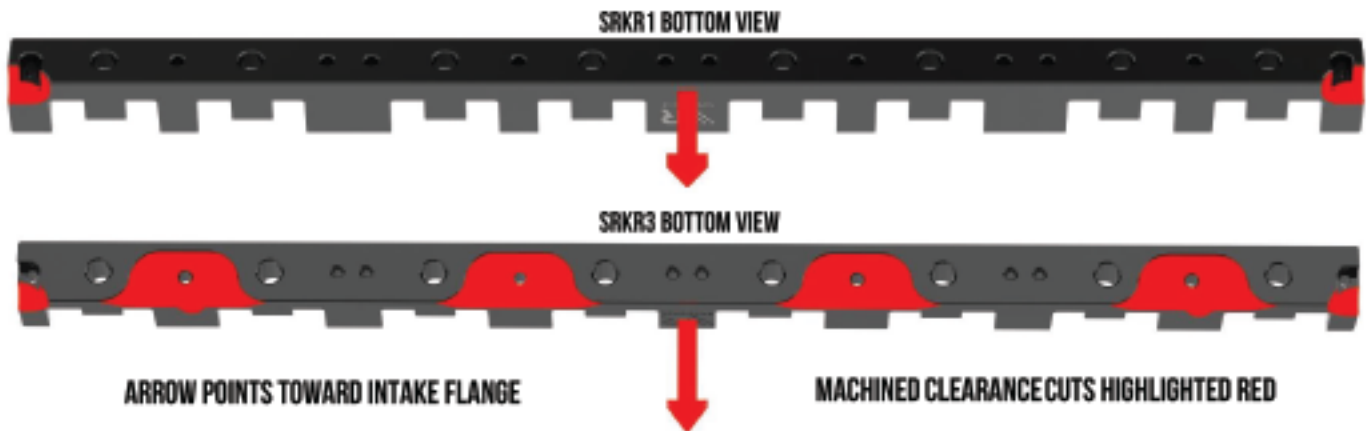
SLIDE A ROCKER ASSEMBLY ONTO ONE SIDE OF THE SHAFT UNTIL IT IS CENTERED OVER THE ROCKER BOLT HOLE. INSTALL A THRUST WASHER ON THE OUTSIDE OF THE ROCKER TO RETAIN THE ROCKER ONTO THE SHAFT. REPEAT THIS STEP FOR THE OTHER SIDE AND THE REST OF THE SHAFTS

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### STEP 11:

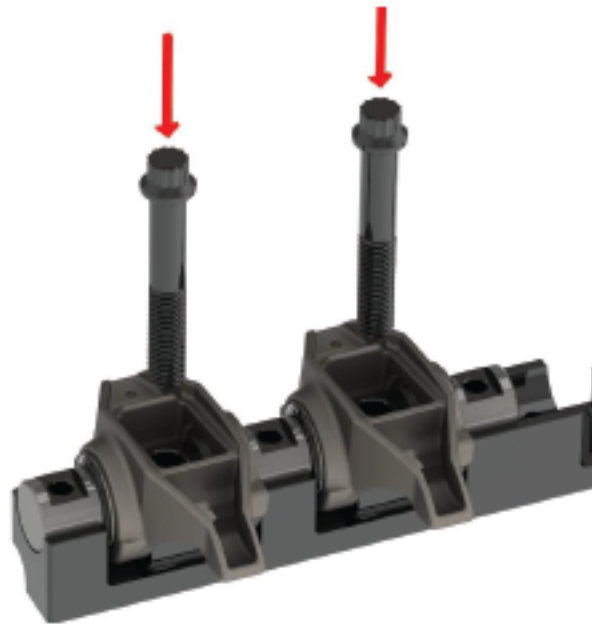
PLACE ONE SHAFT/ROCKER ASSEMBLY ONTO THE STAND, MAKING SURE TO USE THE WASHERS TO CENTER THE ROCKER INTO POSITION. INSERT THREE OF THE SOCKET HEAD BOLTS (PART ID #3) INTO EACH SHAFT. TORQUE TO 50 IN/LBS. REPEAT THIS STEP FOR EACH ROCKER/SHAFT ASSEMBLY.



### STEP 12:

ONCE ALL SHAFTS ARE ASSEMBLED WITH ROCKERS AND INSTALLED ON THE STAND, PLACE THE STAND ON THE CYLINDER HEAD ORIENTED SO THE MACHINED CLEARANCE CUTS IN THE STAND WILL CLEAR THE FEATURES IN THE CYLINDER HEAD.

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### **STEP 13:**

**ROTATE THE ENGINE SO THE MAJORITY OF THE PUSHRODS/LIFTERS ARE ON THE BASE CIRCLE OF THE CAMSHAFT. BEGIN TIGHTENING DOWN THE CENTER ROCKER BOLTS (PART ID #6), SLOWLY WORKING DOWN THE SHAFT/ROCKER/BASE ASSEMBLY DOWN UNTIL THE ENTIRE ASSEMBLY IS CONTACTING THE CYLINDER HEAD. TORQUE CENTER ROCKER BOLTS TO 22FT/LBS. REPEAT FOR THE OTHER SIDE OF THE ENGINE.**