



A Division of Thiessen Products, Inc.

# INSTRUCTION SHEET FOR TOOL #2240

## HEAD HOLDER (VALVE GUIDE REMOVER & INSTALLER)

Use on Big Twin 1948-Present: Pan, Shovel, Evo, and T/C.  
Use on Sportster 1957-Present

This kit has been designed to remove and install shoulderless guides by pressing them out into the intake or exhaust port. If the guides are shouldered, you must remove them with a hammer, press, or guide driver from the inside of port outwards, only after you have cleaned and removed all carbon from around the O.D. of guides. This tool will also install shouldered guides.

**Note:** *This Tool may be used in other than stock valve seat sizes. If you have a head with an over size valve seat, you will need to find (from the list of adapters, see below) the appropriate size adapter that will fit the seat the tightest.*

**Attention:** *This is a precision tool. If you treat it as such, it will give you a lifetime of use.*

JIMS Tools needed to perform this service; See JIMS catalog at [www.jim-susa.com](http://www.jim-susa.com) for other valve guide tools.

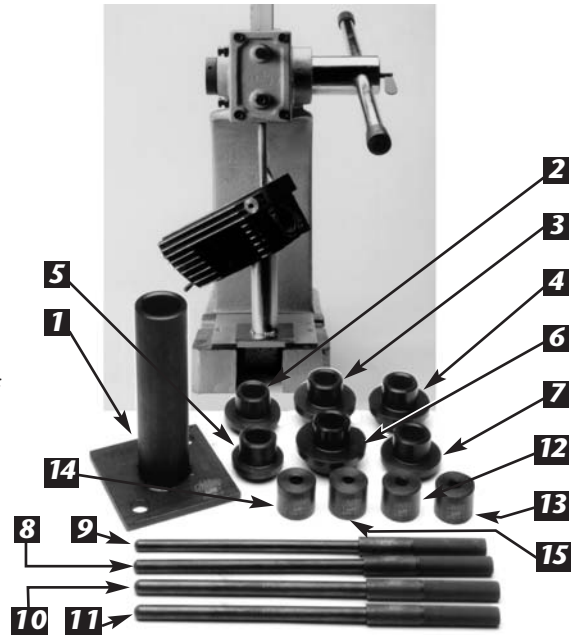
### Other parts and tools needed

1. Service Manual for the year and model you will be repairing.
2. Parts book for the year and model you will be repairing.

### REMOVING SHOULDERLESS GUIDES:

Use the application chart provided. (see right) Select the appropriate adapter, insert and pilot for the head you are working on.

**Example:** If repairing a late Twin Cam head with a 7mm guide, use Adapter No. **2240-2** on the exhaust. Next, install No. **2240-11-4**, 7mm Insert into the bore of base assembly No. **2240-1**. On the Intake side, use Adapter No. **2240-4**. You will be using the same Insert No. **2240-11-4** in the bore



<b>APPLICATION AND PARTS AVAILABLE SEPARATELY CHART</b>			
No.	Qty.	Description	Part No.
1	1	BASE ASSEMBLY	2240-1
2	1	ADAPTER, INT, 1986-03 883 XL, ALL T/C EXH	2240-2
3	1	ADAPTER, INT, B/T, EVO, 1986 XL1100 EXH. SHOVELHEAD and 1986-03 883 EVO XL	2240-3
4	1	ADAPTER, INT, SHOVEL HEAD / EXH BIG TWIN, EVO, 1986 1100, XL, MOST ALL T/C	2240-4
5	1	ADAPTER, INT / EXH, IRONHEAD XL	2240-5
6	1	ADAPTER, INT, 1987-1100 / 1988-03 1200 XL, EVO	2240-6
7	1	ADAPTER, EXH, 1987-1100 / 1988-03 1200 XL, EVO	2240-7
8	1	PILOT .306 DIAMETER	2240-16
9	1	PILOT .371 DIAMETER	2240-17
10	1	PILOT .338 DIAMETER	2240-18
11	1	PILOT 7MM DIAMETER	2240-19
12	1	INSERT, .310 DIAMETER	2240-11-1
13	1	INSERT, .375 DIAMETER	2240-11-2
14	1	INSERT, .342 DIAMETER	2240-11-3
15	1	INSERT, 7MM DIAMETER	2240-11-4
16	1	INSTRUCTIONS	2240-15

## NOTE: PLEASE READ ALL INSTRUCTIONS COMPLETELY BEFORE PERFORMING ANY WORK! IF YOU DO NOT KNOW WHAT YOU ARE DOING, DO NOT DO IT!

No information in this instruction sheet pertaining to motorcycle repair is represented as foolproof or even altogether safe. Even something safe, done incorrectly or incompletely can and will backfire. You and only you are responsible for the safety of your repair work and for you understanding the application and use of repair equipment, components, methods and concepts.

Each and every step this tool is designed to do must be carefully and systematically performed safely by you. All information listed in this instruction sheet has been tested, re-tested and used daily in JIMS® Research and Development Department.

**ALWAYS WEAR SAFETY GLASSES OR OTHER FACE AND EYE PROTECTION SUCH AS FULL FACE SHIELD. JIMS® IS NOT RESPONSIBLE FOR DAMAGE, INJURY, OR YOUR WORK. JIMS® IS NOT RESPONSIBLE FOR THE QUALITY AND SAFETY OF YOUR WORK.**

*Performance Parts For Harley-Davidson Motorcycles*



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of base assembly No.2240-1. Use Pilot No. 2240-19 to press the 7mm guide from both the intake and exhaust. **See FIG 1 & PARTS LIST**

**Note:** Before removing the guides, make sure to remove the lock ring from the top side of guide, this ring will not be reused.

1. Before clamping or bolting the support tube assembly No. 2240-1 to your press, make sure the your press ram center line is in alignment with the center line of support tube assembly No. 2240-1.

**See FIG 1 & PARTS LIST**

2. Place the appropriate size Insert into support tube stand. The insert needs to have the same I.D. size as the guide being removed.

**See FIG 1 & PARTS LIST**

3. Place the appropriate size Adapter on the top of support tube stand. Use the Adapter that best fits the valve seat of head you are working with.

**See FIG 1 & PARTS LIST**

**Note:** Making sure the Adapter is correctly centered on valve seat.

4. Install appropriate size Pilot through guide and into alignment insert in base of tool.

5. Start applying pressure to Pilot. Just before the guide is starting to move, STOP and back off on applying pressure so the Pilot can center itself. Now continue to press old guide from head. Repeat all the above steps for the other guides.

### INSTALLING SHOULDERLESS GUIDES:

Select a replacement guide of the correct size; see your service manual for determining the replacement guide size. Your new guide must be installed to the correct height. JIMS has most late style valve guide depth installing collars that can be used to set the installed height of most shoulderless guides, or you can mark the O.D. of new guide from the top down with the correct height, then install to the mark. You will be using the same assembly of Pilots, Inserts, and Adapters used in the removal of guides. Please see text under: REMOVING SHOULDERLESS GUIDES

1. Apply a good quality press fit lube to O.D. and I.D. of guide and the guide's bore in head.

2. Start applying pressure to Pilot. Just before the guide is starting to move, STOP and back off on applying pressure so the Pilot can center itself. Now continue to press new guide into head. Repeat all the above steps for the other guides. If you are using one of the Depth installing collars available, then press guide into head until depth collar stops on head. Or press guide until you have installed to your mark.

### WHEN USING SHOULDERED GUIDES:

1. Follow the above installation instructions. Shouldered guides will stop at the correct height.

