

ORIGINAL  
LISHI TOOLS



李志勤



HU162



# ORIGINAL LISHI TOOLS

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- **Lock Profile:** HU162 VAG 2015+
- **Tool Type:** 2-in-1 Pick & Decoder
- **Compatibility:** DOOR
- **Finish:** Anti-Glare
- **IC Card:** 1421
- **Cuts:** 10
- **Side Cuts:** 4
- **Security Key** ( One Sided Entry )

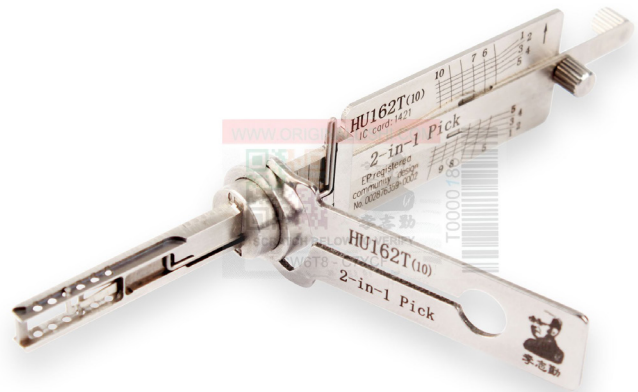
## SUITS

### VOLKSWAGEN

- PASSAT 2015-
- TOUAREG 2018-

### AUDI

- A4 2015-
- A7 2015-
- Q3 2015-
- Q5 2015-
- Q7 2015-
- TT 2015-



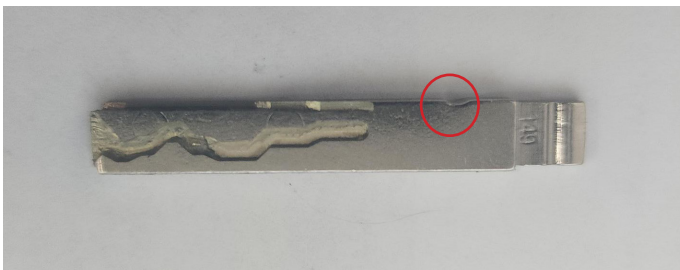
**Art ID: LP-HU162-SC4-D-AG**

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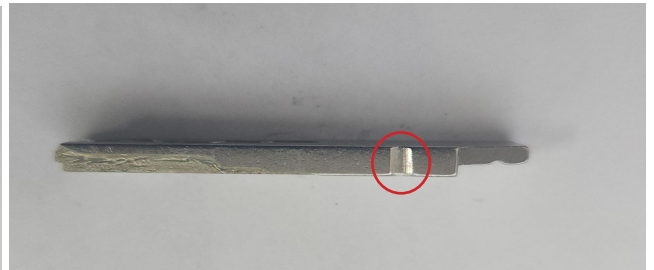
# OEM Door Lock & Key



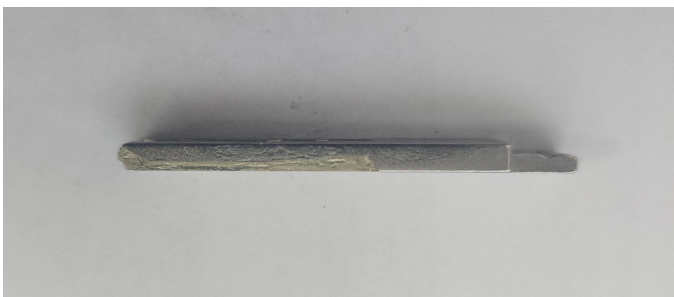
Axis A.



Axis B.



Axis C.

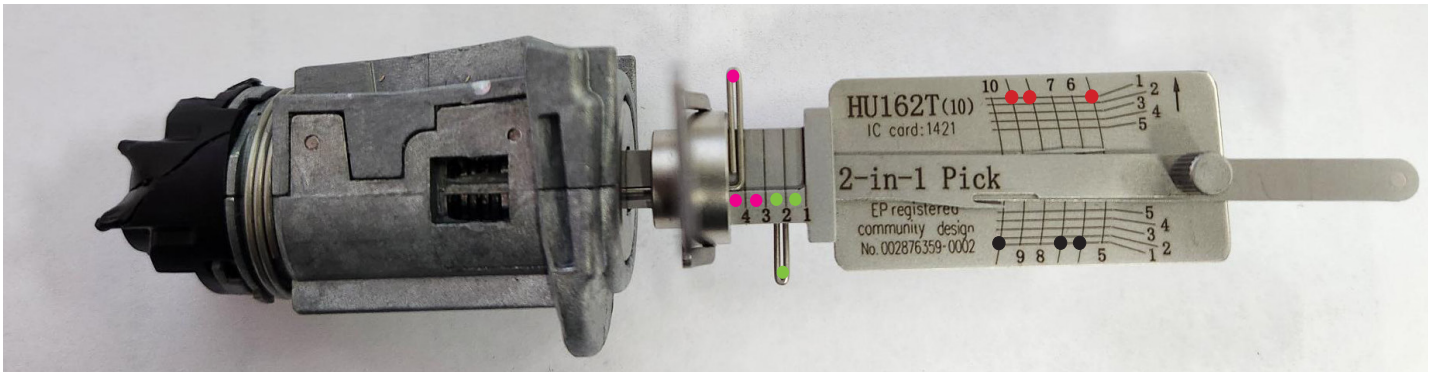


 Chamfer for Axis identification



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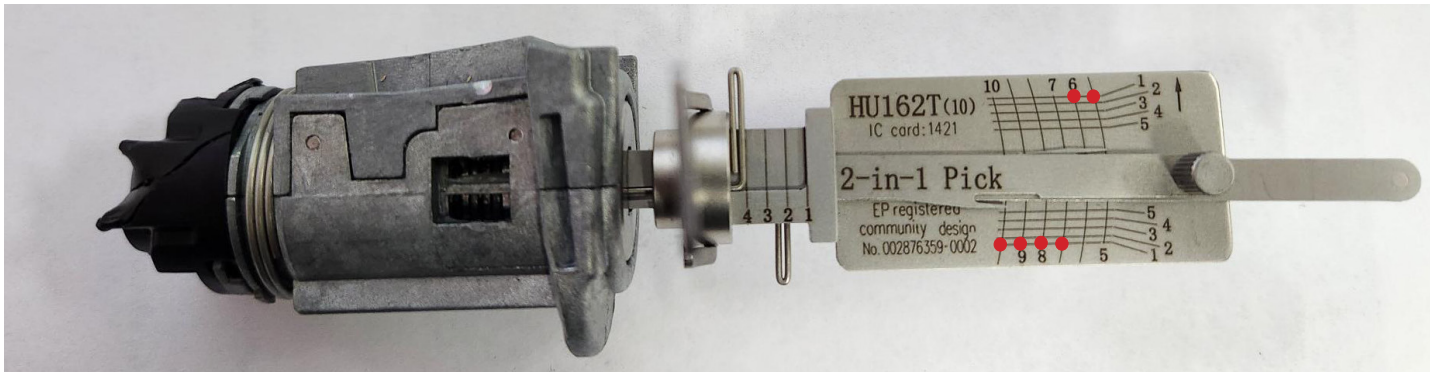
## PICKING DIRECTION - Axis A

5. UP	6. DOWN	7. DOWN	8. UP	9. UP	10. DOWN

## PICKING SIDE CUTS - Axis B & C

1. GREEN LEVER (RIGHT SIDE)	2. GREEN LEVER (RIGHT SIDE)	3. PINK LEVER (LEFT SIDE)	4. PINK LEVER (LEFT SIDE)
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# Picking & Decoding



## DECODING DIRECTION - Axis A

	5.	6.	7.	8.	9.	10.
<b>TOP</b>						
	5.	6.	7.	8.	9.	10.
<b>BOTTOM</b>						

- When decoding this lock it is vital to decode both Top & Bottom in each cut position.
- The reading of the cut depth Top & the cut depth Bottom will always add up to 6.
- Example when reading a 1 depth at the Top , The bottom should read as a 5 at the bottom to equal 6.
- Using the table above fill in both positions Top & Bottom in each cut position. The positions in Red are the cuts that need to be entered into your key machine.



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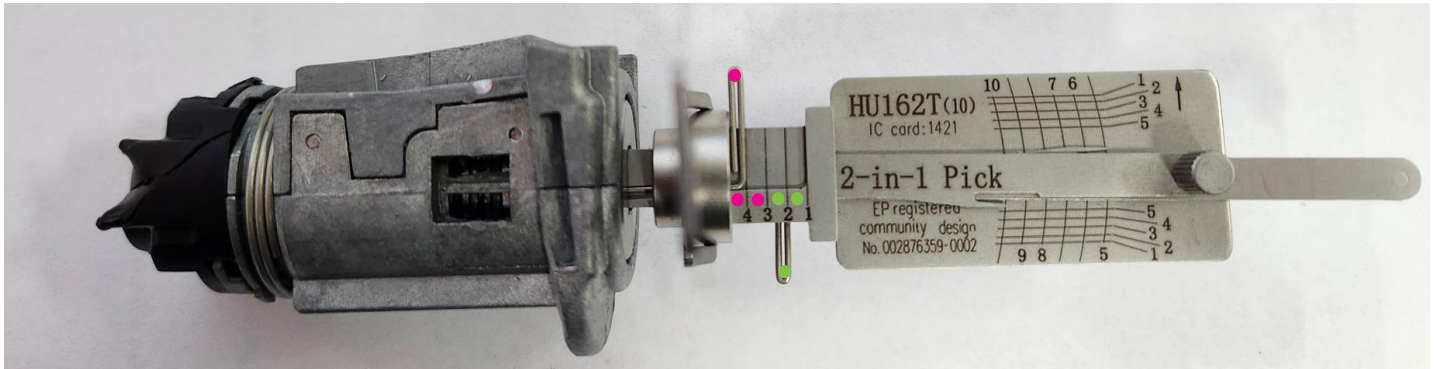
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## DECODED EXAMPLE AXIS A

	5.	6.	7.	8.	9.	10.
TOP	1	3	3	5	4	2
BOTTOM	5	3	3	1	2	4

The Partial Key Bitting on Axis A is **1 3 3 1 2 4**  
Need to now decode Axis B & C to complete the Bitting Calculations.

# Picking & Decoding



Axis B & Axis C Are calculated by retrieving the Angles of each cut position before & after they are picked.

	Before Picked	After Picked	Bitting
1.			
2.			
3.			
4.			

## MASTER TABLE

Before Picked	After Picked	Bitting Calculation
60	30	2
60	60	4
90	30	1
90	60	3



# ORIGINAL LISHI TOOLS

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## DECODED EXAMPLE

	Before Picked	After Picked	Bitting
1.	90	60	3
2.	60	60	4
3.	90	60	3
4.	90	30	1

Bitting is Calculated using the Master Table below.

**Example:** Position 1 Read as 90 before picked & 60 when picked.  
Using the table below  $90 \& 60 = 3$

The Calculated Bitting is: **3 - 4 - 3 - 1**

## MASTER TABLE

Before Picked	After Picked	Bitting Calculation
60	30	2
60	60	4
90	30	1
90	60	3



# Picking & Decoding

The Bitting must now be entered into another table to calculate Axis B & C completely for Key Cutting.

	1.	2.	3.	4.
Axis B				
Axis C				

The calculated Bitting must be entered into the red cells of the table.

	1.	2.	3.	4.
Axis B			3	1
Axis C	3	4		

To Calculate the missing cuts in the White cells Each cut position must Add up to **5**.

	1.	2.	3.	4.
Axis B	2	1	3	1
Axis C	3	4	3	4



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## DECODED EXAMPLE AXIS A

	5.	6.	7.	8.	9.	10.
TOP	1	3	3	5	4	2
BOTTOM	5	3	3	1	2	4

	1.	2.	3.	4.
Axis B	2	1	3	1
Axis C	3	4	3	4

# Picking & Decoding

Fill in the final Table with known bitting from previous tables.

	1	2	3	4	5	6	7	8	9	10
Axis A					1	3	3	1	2	4
Axis B	2	1	3	1						
Axis C	3	4	3	4						

	1	2	3	4	5	6	7	8	9	10
Axis A	4	5	3	5	1	3	3	1	2	4
Axis B	2	1	3	1	1	1	1	1	1	1
Axis C	3	4	3	4	2	2	2	2	2	2

On **Axis A** - To Calculate the the 1st 4 Bittings in the White cells Each cut position must Add up to **6**.

Calculate using the Bitting from **Axis B** . and add the difference to **Axis A** in each cut position.

On **Axis B** - Fill the rest of the bittings with 111111

On **Axis C** - Fill the rest of the Bittings with 222222



# ORIGINAL LISHI TOOLS

17/02/2023 4:20 PM

> Search > IC Card(1421)

Key Blanks: SILCA: HU162T

Bitting

Decode

Key info

Menu

Cut

	1	2	3	4	5	6	7	8	9	10
Axis A	4	5	3	5	1	3	3	1	2	4
Axis B	2	1	3	1	1	1	1	1	1	1
Axis C	3	4	3	4	2	2	2	2	2	2

# Decoding & Cutting

17/02/2023 4:22 PM

> Search > IC Card(1421)

1  
2  
3

Key info

Menu

2 1 3 1 1 1 1 1 1 1

Key Blanks: SILCA: HU162T

Bitting

Decode

Cut

17/02/2023 4:23 PM

> Search > IC Card(1421)

1  
2  
3

Key info

Menu

3 4 3 4 2 2 2 2 2 2

Key Blanks: SILCA: HU162T

Bitting

Decode

Cut