



Dead Length HRG Collet Chuck

Setup manual

IMPORTANT NOTE:

Before you use the product, please read instructions carefully.

Keep the instructions on file.



Scan to view
Dead Length Collet Chuck
Installation



SPECIFICATION OF DEAD LENGTH COLLET CHUCK

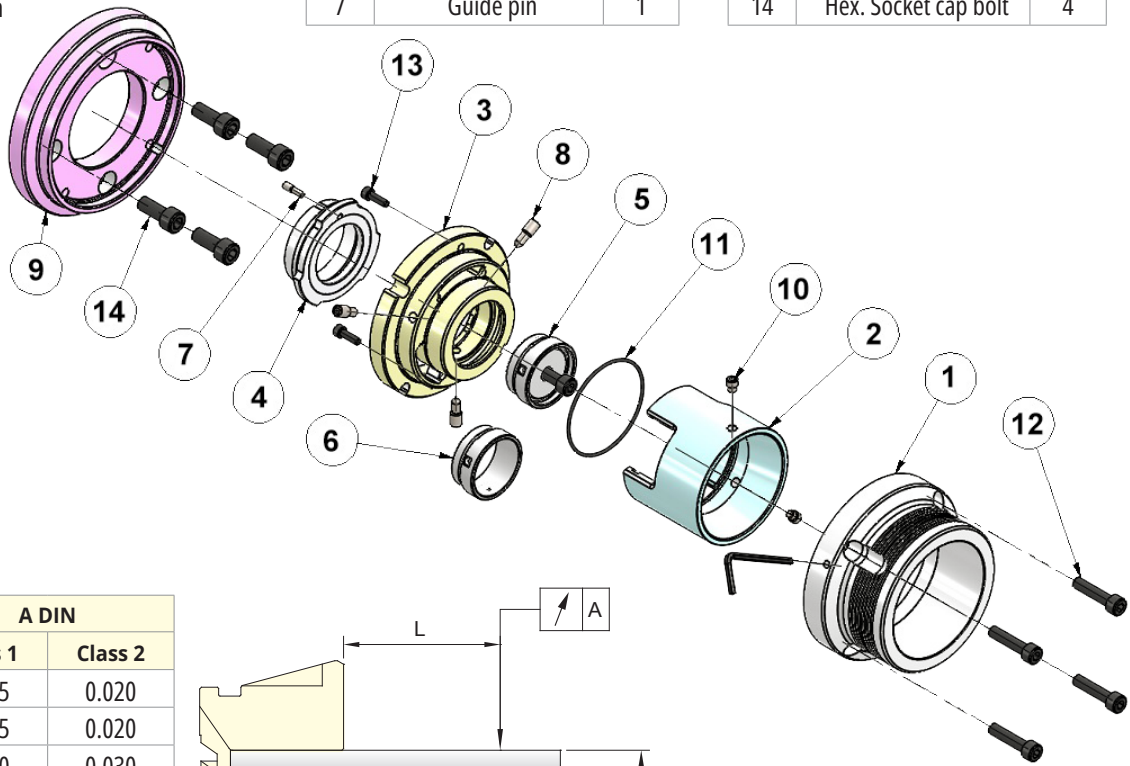
| Model | | Plunger stroke | Max. Chucking Capacity | | | Max. D.B. pull | Max. clamping force | Max. speed | Weight | Matching steel collet | Max. pressure MPa (kgf/cm²) |
|--------|----|----------------|------------------------|------|--------|----------------|---------------------|------------|--------|-----------------------|-----------------------------|
| | | | Round | Hex | Square | | | | | | |
| | | | mm | mm | mm | | | | | | |
| HRG-52 | A5 | 4.5 | 4–52 | 7–36 | 7–45 | 39.2 (4000) | 92.1 (9400) | 7000 | 7.8 | HRG-52 | 3.0 (30) |
| HRG-65 | A6 | 4.5 | 4–65 | 8–56 | 8–46 | 44.1(4500) | 103 (10500) | 6000 | 9.5 | HRG-65 | 2.7 (27) |
| HRG-65 | A8 | 4.5 | 4–65 | 8–56 | 8–46 | 44.1 (4500) | 103 (10500) | 6000 | 9.5 | HRG-65 | 2.7 (27) |

PARTS LIST OF DEAD LENGTH COLLET CHUCK

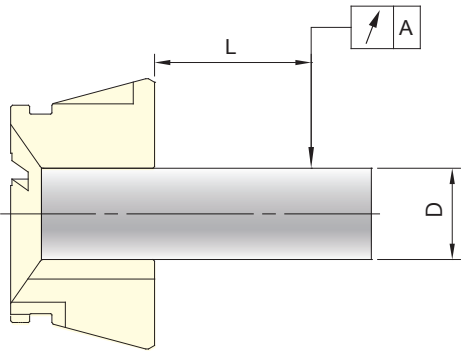
- When clamping a workpiece with a fixed length, use part 5
- When holding a through-hole workpiece, insert the hex wrench into the hole of part 1 to access part 8 (3 pcs), and then replace part 5 with part 6.

| No. | Name of parts | Q'ty |
|-----|----------------------|------|
| 1 | Body | 1 |
| 2 | Wedge plunger | 1 |
| 3 | Plate | 1 |
| 4 | Draw nut | 1 |
| 5 | Adjustable Part Stop | 1 |
| 6 | Chip Cover | 1 |
| 7 | Guide pin | 1 |

| No. | Name of parts | Q'ty |
|-----|----------------------|------|
| 8 | Set screws | 3 |
| 9 | Adapter plate | 1 |
| 10 | Guide pin | 2 |
| 11 | O-ring | 1 |
| 12 | Hex. Socket cap bolt | 4 |
| 13 | Hex. Socket cap bolt | 2 |
| 14 | Hex. Socket cap bolt | 4 |



| D | L | A DIN | |
|-------------|-----|---------|---------|
| | | Class 1 | Class 2 |
| Test Bar mm | mm | | |
| 4.0–6.0 | 16 | 0.015 | 0.020 |
| 6.0–10.0 | 25 | 0.015 | 0.020 |
| 10.0–18.0 | 40 | 0.020 | 0.030 |
| 18.0–24.0 | 50 | 0.020 | 0.030 |
| 24.0–30.0 | 60 | 0.020 | 0.030 |
| 30.0–50.0 | 80 | 0.030 | 0.040 |
| 50.0–60.0 | 100 | 0.030 | 0.040 |



Note 1: Collet chucks conform to DIN 6343 Class 2.
Note 2: HAAS' rubber grip collets conform to DIN 6343 Class 1.

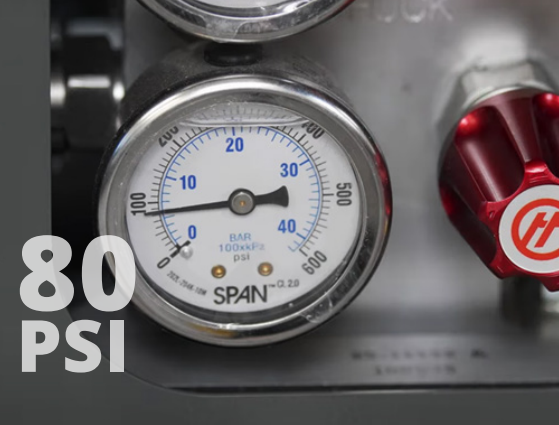
DEAD LENGTH COLLET CHUCK SETUP STEPS

TIPS:

- *Setting 282 allows users to switch between OD and ID clamping
- OD clamping tells the controller the workpiece is clamped when the draw tube is retracted (this is true for standard pull-back collet chucks)
- ID clamping tells the controller the workpiece is clamped when the draw tube is extended (use this setting for Dead Length OD clamping)
- *M14 activates the spindle brake

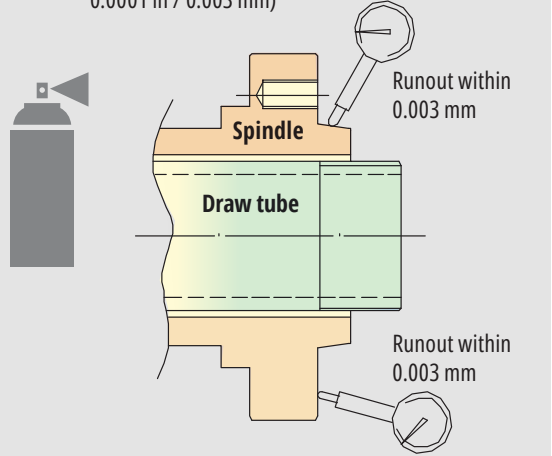
STEP 1.

Lower chuck pressure to around **80 PSI**. It should be as low as possible but still be able to extend and retract the draw bar.



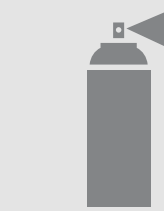
STEP 2.

Clean spindle nose and apply a thin layer of **rust preventative**. (Check runout within 0.0001 in / 0.003 mm)



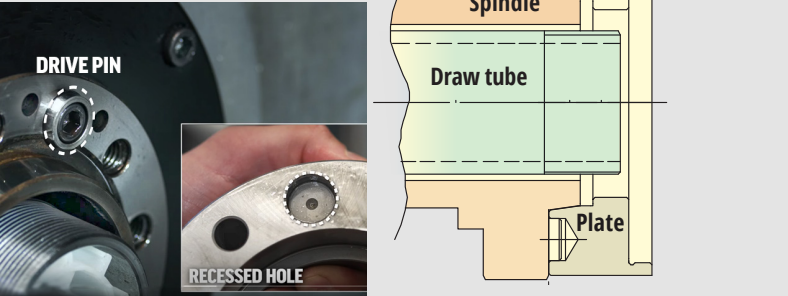
STEP 3.

Ensure the **adapter plate is clean** and apply a thin layer of **rust preventative** to the mating surface.



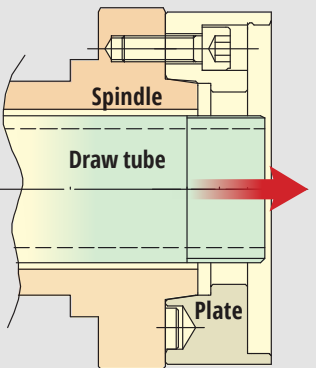
STEP 4.

Align the spindle nose drive pin with the recessed holes on the adapter plate and bolt adapter plate down tightening in a cross pattern. (Runout within 0.0002 in / 0.005 mm) (Use **M14** to help tighten bolts)



STEP 5.

Ensure the draw tube is extended out.



STEP 6.

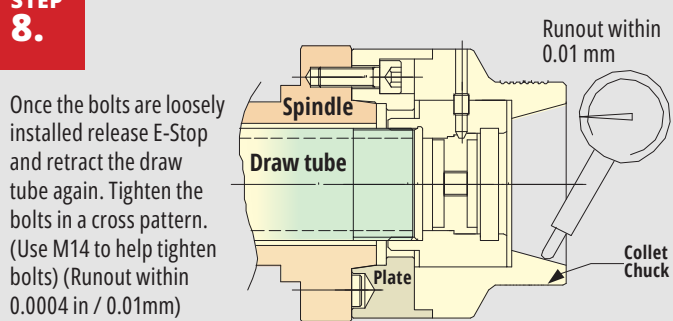
Screw the draw nut and collet chuck body assembly all the way down until it bottoms out then back it off until the bolt holes align with the threaded holes in the adapter plate.

STEP 7.

Using the foot pedal retract the draw tube. If the bolt holes do not line up extend the draw tube until the chuck unseats from the adapter plate and E-Stop.

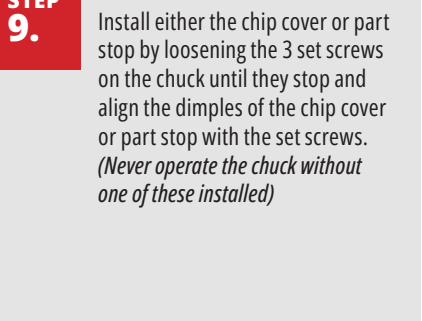
STEP 8.

Once the bolts are loosely installed release E-Stop and retract the draw tube again. Tighten the bolts in a cross pattern. (Use M14 to help tighten bolts) (Runout within 0.0004 in / 0.01mm)



STEP 9.

Install either the chip cover or part stop by loosening the 3 set screws on the chuck until they stop and align the dimples of the chip cover or part stop with the set screws. (Never operate the chuck without one of these installed)



STEP 10.

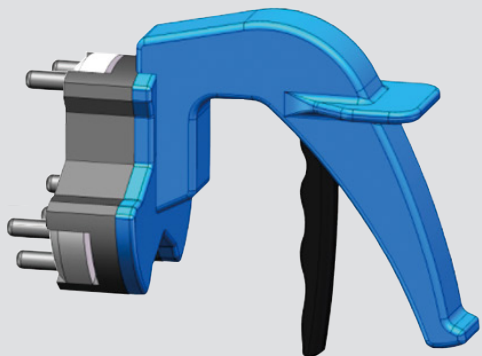
Slide in the chip cover or part stop concentric to the chuck, and tighten the set screws

STEP 11.

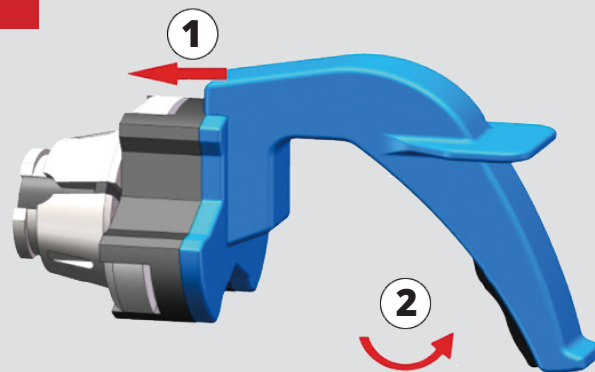
Raise the pressure to your desired clamping pressure and Change setting 282 to ID Clamping.

USE COLLET CHANGING TOOL TO INSTALL / REMOVE THE COLLET

1

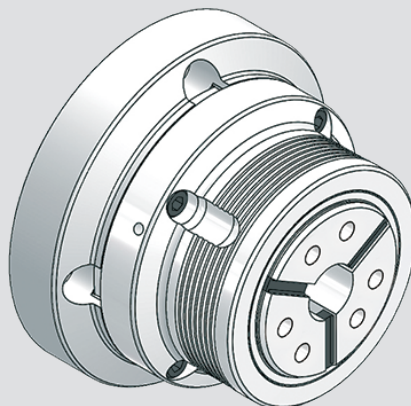
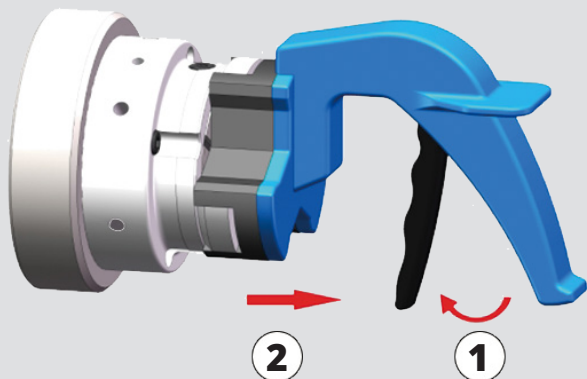


2



The collet chuck must be unclamped before proceeding to step 3

3



- **Tighten the mounting bolts** according to the specified torque.
- **Use included bolts only.**

| Bolt size | Tightening torque |
|-----------|-------------------------|
| M6 | 12.7 N m (9.4 lb-ft) |
| M8 | 38.2 N m (28.2 lb-ft) |
| M10 | 72.6 N m (53.5 lb-ft) |
| M12 | 106.8 N m (78.8 lb-ft) |
| M14 | 170.6 N m (125.8 lb-ft) |
| M16 | 250.0 N m (184.4 lb-ft) |
| 7/16"-14 | 108.5 N m (80.0 lb-ft) |

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