

Koyo®

BEARING MOUNTING & REMOVAL TOOLS

S L O O T



JTEKT

Koyo | **TOYODA**

Induction Heaters

Induction heating is a fast and controlled heating method to help facilitate shrink-fit mounting of bearings and other shaft-fitted components. It is a safe and environmentally friendly alternative to traditional heating methods such as ovens, oil baths, or blow torches. Koyo induction heaters ensure optimum control during the heating process, automatically regulating the most efficient use of power to provide balanced and fast heating.

- ▶ Correct mounting can lengthen the life span of bearings
- ▶ Automatic time or temperature control
- ▶ Components are automatically demagnetized at the end of the heating cycle
- ▶ Environmentally friendly: no smoke, fumes or oil waste
- ▶ Xtreme Series SXT models BH350 & BH520 provide faster heating and allows the component to be oriented horizontally or vertically



BH350SXT

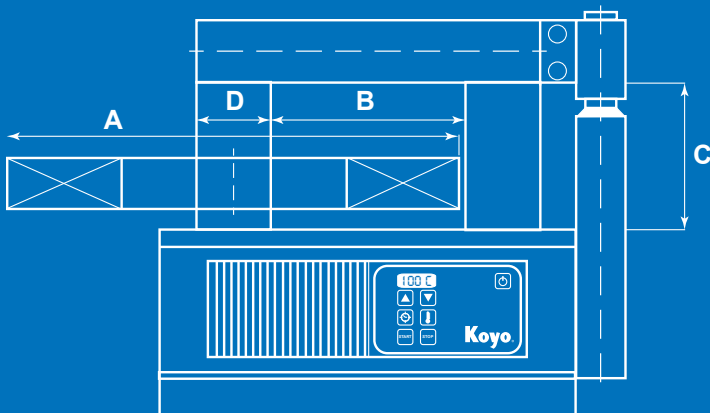
| Type | BH240P | BH350SXT | BH520SXT |
|----------------------------------|------------------------|------------------------|--------------------------|
| Capacity (Maximum) | 1.8 kVA | 1.8 kVA | 1.8 kVA |
| Characteristics | Portable | Xtreme Series Portable | Xtreme Series Stationary |
| Voltage | 120V 50/60 Hz | 120V 50/60 Hz | 120V 50/60 Hz |
| Pole Section (mm) | 40 | 100 | 115 |
| Maximum Bearing Diameter OD (mm) | 240 | 380 | 520 |
| Maximum Weight (+/-) | | | |
| Bearing | 15 kg | 50 kg | 65 kg |
| Other Parts | 10 kg | 30 kg | 50 kg |
| Temperature Control | | | |
| Max Reach | 150° C | 240° C | 240° C |
| Magnetic Probe | Yes | Yes | Yes |
| Digital Display | Yes | Yes | Yes |
| Time Control | | | |
| Max Reach | 0-30 min | 0-45 min | 0-45 min |
| Digital Display | Yes | Yes | Yes |
| Sound Signal | Yes | Yes | Yes |
| Error Report | Yes | Yes | Yes |
| Temperature Hold | Yes | Yes | Yes |
| Auto Demagnetizing | Yes | Yes | Yes |
| Automatic Power Reduction | Yes | Yes | Yes |
| Thermal Safety Guard | Yes | Yes | Yes |
| Dimensions (mm) | 460x240x280 | 600x220x275 | 440x370x420 |
| Mass Heater Body | 21 kg (incl. yokes) | 23 kg (incl. yokes) | 37 kg |
| Available Yokes (mm) | 7, 10, 14, 20, 40 | 7, 10, 14, 20, 40 | 10, 14, 20, 30, 60 |



BH240P



BH520SXT



| Type | BH240P | BH350SXT | BH520SXT | |
|-------------------------------------|--------|----------|----------|-----|
| Max OD (mm) | A | 240 | 380 | 520 |
| Max width (mm) | B | 120 | 135 | 200 |
| Max width - horizontal heating (mm) | C | - | 135 | 230 |
| Cross section poles (mm) | D | 40 | 100 | 120 |

Heating times are subject to the relationship between:

- ▶ Minimum bore & maximum outside diameter, width & weight
- ▶ Required temperature and material type
- ▶ Available power



BMT39

Mounting Tool Kits

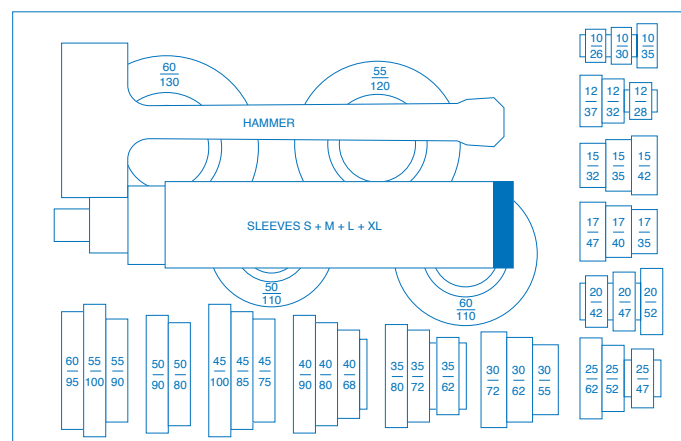
Practical mechanical mounting set for safe, precise and quick mounting of bearings, bushings, sealing rings, cam wheels and pulleys. The set consists of a dead-blow hammer, 3 aluminum sleeves and a set of 39 plastic collets (rings).

The impact resistant plastic collets support the inner and outer rings when mounting, preventing metal to metal contact and possible damage to the bearing rings and shaft.

- ▶ Safe, precise, and fast mounting
- ▶ Prevents metal to metal contact
- ▶ For bearings with bore diameters of 10 - 60mm

Koyo® 39

IMPACT FITTING TOOL SET



| All ISO bearing codes ending with | Example | Impact Sleeve | | | | Impact Ring |
|-----------------------------------|---------|---------------|--------|-------|-------------|-------------|
| | | Small | Medium | Large | Extra Large | |
| 000 | 6000 | S | | | | 10-26 |
| 200 | 2200 | S | | | | 10-30 |
| 300 | 7300 | S | | | | 10-35 |
| 001 | 6001 | S | | | | 12-28 |
| 201 | 3201 | S | | | | 12-32 |
| 301 | 7301 | S | | | | 12-37 |
| 002 | 6002 | S | | | | 15-32 |
| 202 | 2202 | S | | | | 15-35 |
| 302 | 3302 | S | | | | 15-42 |
| 003 | 18003 | S | | | | 17-35 |
| 203 | 7203 | S | | | | 17-40 |
| 303 | 2303 | S | | | | 17-47 |
| 403 | 6403 | | M | | | 20-52 |
| 004 | 7004 | | M | | | 20-42 |
| 204 | 3204 | | M | | | 20-47 |
| 304 | 2304 | | M | | | 20-52 |
| 404 | 8404 | | M | | | 25-82 |
| 005 | 7005 | | M | | | 25-47 |
| 205 | 22205 | | M | | | 25-52 |
| 305 | 3305 | | M | | | 25-82 |
| 405 | 6405 | | M | | | 30-72 |
| 006 | 6006 | | M | | | 30-55 |
| 206 | NJ 206 | | M | | | 30-82 |
| 306 | 7306 | | M | | | 30-72 |
| 406 | 6406 | | | L | | 35-80 |
| 007 | 7007 | | | L | | 35-82 |
| 207 | 22207 | | | L | | 35-72 |
| 307 | 1307 | | | L | | 35-80 |
| 407 | NJ 407 | | | L | | 40-90 |
| 008 | 6008 | | | L | | 40-88 |
| 208 | 2208 | | | L | | 40-80 |
| 308 | 7308 | | | L | | 40-90 |
| 408 | 6408 | | | L | | 45-100 |
| 009 | 7009 | | | L | | 45-75 |
| 209 | 6209 | | | L | | 45-85 |
| 309 | N 309 | | | L | | 45-100 |
| 409 | 6409 | | | L | | 50-110 |
| 010 | 6010 | | | L | | 50-80 |
| 210 | 2210 | | | L | | 50-90 |
| 310 | 21310 | | | L | | 50-110 |
| 011 | 6011 | | | | XL | 55-90 |
| 211 | 20211 | | | | XL | 55-100 |
| 311 | 3211 | | | | XL | 55-120 |
| 012 | 6012 | | | | XL | 60-95 |
| 212 | 20212 | | | | XL | 60-110 |
| 312 | 3215 | | | | XL | 60-130 |



Select the correct collett size and sleeve using the chart above. The bearing must be at a right angle to the shaft. In addition, the shaft should be slightly lubricated.

Apply mounting force to the bearing by placing the fitting tool impact ring and sleeve against the bearing or component and use the hammer (or a press) to advance the bearing to it's proper location on the shaft or in the housing.

Do not apply a sleeve to the outer raceway when mounting on a shaft, or to the inner raceway when mounting into a housing.

NEVER mount a bearing by striking it directly with a hammer

Bearing Pullers

Koyo's self centering bearing pullers provide a safe and easy way to remove a wide variety of parts including bearings, bushings, wheels, gears, and pulleys.

These tools are recommended for all motor repair shops, service companies, maintenance shops, mining, paper mills, chemical plants, etc.

- ▶ The self centering design helps prevent damage to the shaft and work piece being pulled.
- ▶ The arms adjust themselves simultaneously, either inwards or outwards.
- ▶ The self-locking system guarantees the arms neither bend nor deflect.



| <i>Koyo Hydraulic Bearing Pullers</i> | | | | |
|--|------------------------|----------------------------------|----------------------------|-------------------------|
| Part Number | Capacity (tons) | Maximum Shaft Length (mm) | Maximum Spread (mm) | Unit Weight (kg) |
| KHP4 | 4 | 190 | 325 | 8.0 |
| KHP8 | 8 | 280 | 450 | 12.0 |



| <i>Koyo Mechanical Bearing Pullers</i> | | | | |
|---|------------------------|----------------------------------|----------------------------|-------------------------|
| Part Number | Capacity (tons) | Maximum Shaft Length (mm) | Maximum Spread (mm) | Unit Weight (kg) |
| KMP2 | 2 | 80 | 120 | 1.6 |
| KMP3 | 3 | 120 | 180 | 2.3 |
| KMP5 | 5 | 160 | 270 | 4.3 |

Koyo®