

COLD MOUNTING

MOUNTING TOOL KIT CASE THE NTN TOOL KIT ENABLES QUICK AND ACCURATE MOUNTING OF BEARINGS

	NTN Part Number	Bore Dia. (mm)	OD (mm)	What's in the Box	Additional Information
	TLS-1FTSET33	10-50	26-110	33 impact rings 3 mounting sleeves 1 dead blow mallet	Rings made of impact resistant synthetic material. Can be used with a press as well. Covers 400 different bearings. Strong, lightweight aluminum mounting sleeves.

ADJUSTABLE SPANNERS 5 SPANNERS FOR TIGHTENING AND LOOSENING UP TO 30 DIFFERENT SIZED NUTS

NTN Part Number	Nut Dia. (mm)	Nut Type	Additional Information
TLS-HKSPANNER15-35 TLS-HKSPANNER35-50 TLS-HKSPANNER50-80 TLS-HKSPANNER80-120 TLS-HKSPANNER120-180 TLS-PNSPANNER15-35 TLS-PNSPANNER35-50 TLS-PNSPANNER50-80 TLS-PNSPANNER80-120 TLS-PNSPANNER120-180	15-35 35-50 50-80 80-120 120-180 15-35 30-50 50-80 80-120 120-180	slotted slotted slotted slotted slotted hole hole hole hole	For tightening and loosening of all KM, KML, and KMK type nuts and also B, TB, and TBR precision nuts. Spanners are made of extremely strong tempered steel. Laser etched for easy identification. Hole in handle for easy storage.

HEATERS

FAST THERM 20 PORTABLE INDUCTION HEATER

NTN Part Number	Bore Dia. (mm)	Max Bearing Weight	Voltage	Additional Information
TLS-FASTTHERM20-110V	20-280	20kg (44lbs)	110V Other voltages available upon request.	Small, lightweight heater is only 17kg (37.4lbs) making it ideal for working on-site. 3 Core bars for 20mm, 35mm, and 60mm bearing bores, and a carrying case are included.

FAST THERM 35 INDUCTION HEATER WITH PIVOTING ARM, A BEST-SELLER FOR MAINTENANCE AND PRODUCTION WORKSHOPS

NTN Part Number	Bore Dia. (mm)	Max Bearing Weight	Voltage	Additional Information
TLS-FASTTHERM35-110V	20-410	35kg (77lbs)	110V Other voltages available upon request.	Used as fixed equipment, but at 31kg (68.2lbs) can easily be moved using 2 side handles. 0-99 min heating time control for large parts.

FAST THERM 150/300/600/1200 A RANGE OF POWERFUL AND ROBUST HEATERS FOR PARTS UP TO 1200KG (2.640LBS)

	NTN Part Number	Bore Dia. (mm)	Max Bearing Weight	Voltage	Additional Information
These bearing heaters	TLS-FASTTHERM150-230V/500V/560V	30-490	150kg (330lbs)	230V/500V/560V	Contact your NTN distributor for details.
available upon request.	TLS-FASTTHERM300-230V/500V/560V	30-740	300kg (660lbs)	Other voltages	
Contact your distributor	TLS-FASTTHERM600-230V/500V/560V	45-900	600kg (1,320lbs)	available upon	
for information.	TLS-FASTTHERM1200-230V/500V/560V	85-1500	1200kg (2640lbs)	request.	



Fast Therm 150







Fast Therm 600

Fast Therm 1200

MECHANICAL DISMOUNTING

BORE PULLERS PULLER KITS FOR INTERNAL GRIPPING OF THE BORE. FOR QUICK AND EASY DISMOUNTING OF BEARINGS TIGHTLY MOUNTED IN A HOUSING

NTN Part Number	Bore Range (mm)	What's in the Box	Additional Information
TLS-BREPULLER12-45 TLS-BREPULLER35-100	12-45 35-100	6 pullers, 2 extractors 4 pullers, 1 extractor	Mechanical spindle with handle. Pullers made from break and wear-resistant steel, carbonitride arms. Supplied with sturdy steel carrying case.

PULLER-SEPARATOR WITH MECHANICAL SPINDLE FOR EASY AND SAFE DISMOUNTING OF RINGS OR BEARINGS THAT ARE TIGHTLY FITTED ON A SHAFT AND DIFFICULT TO GRIP

NTN Part Number	OD Range (mm)	What's in the Box	Additional Information
TLS-BACKPULLER22-115	22-115	1 puller/pusher with mechanical spindle 1 set of extension rods 1 2-blade separator	5 ton capacity mechanical spindle. Carbonitride arm requires no maintenance. Supplied with sturdy steel carrying case.

2/3 ARMS SELF-CENTERING MECHANICAL PULLERS A SIMPLE, ROBUST AND EFFICIENT RANGE OF PULLERS FOR EASY AND SAFE DISMOUNTING OF SMALL OR MEDIUM SIZE BEARINGS

	NTN Part Number	Max Spread (mm)	Max Reach (mm)	Capacity (Tons)	Additional Information
	TLS-MECHPULLER2/3-120 TLS-MECHPULLER2/3-180 TLS-MECHPULLER2/3-270	120 180 270	80 120 160	2 3 5	Made from hardened steel. Self-centering mechanism aligns arms, self-locking arms prevent bending and slipping. Convertible between 2 and 3 arms.

2/3 ARMS SELF-CENTERING HYDRAULIC PULLERS ARANGE OF POWERFUL PULLERS FOR SAFE AND EASY DISMOUNTING OF LARGE BEARINGS AND FORCE-FITTED PARTS SUCH AS PULLEYS AND GEAR WHEELS

NTN Part Number	Max Spread (mm)	Max Reach (mm)	Capacity (Tons)	Cyclinder Stroke (mm)	Additional Information
TLS-SCHYDPULLER-4T TLS-SCHYDPULLER-12T TLS-SCHYDPULLER-20T	325 485 570	190 305 365	4 12 20	60 85 111	Supplied in a strong case ready to use with no assembly required before use. Pump handle rotates through 360° for comfortable operation.

ACCESSORY CASE FOR 4 AND 12 TON HYDRAULIC PULLERS A STRONG GRIP FOR SAFE AND EASY DISMOUNTING

NTN Part Number	Capacity (Tons)	What's in the Box	Additional Information
TLS-SCHYDPULLER-4TACCSET TLS-SCHYDPULLER-12TACCSET	12	1 2-blade separator, extension rods + frame for hydraulic puller cylinder 2-blade separator, extension rods + frame for hydraulic puller cylinder	For dismounting where low clearance on the back of the bearing precludes the use of jaw pullers.

TRI-SECTION PULLING PLATE, UNIVERSAL A STRONG GRIP FOR SAFE AND EFFECTIVE DISMOUNTING USING A MECHANICAL OR HYDRAULIC EXTRACTOR

		HYDRAU	LIC EXTRACTOR	
	NTN Part Number	Shaft Dia. (mm)	Additional Information	
全人	TLS-3BACKPULLER50-210	50-210	Complements 3 jaw puller when it cannot provide enough grip. Compatible with TLS-MECHPULLER2/3-270 & TLS-SCHYDPULLER-4T. Prevents lockup from misalignment by evenly distributing the extraction force.	

ACCESSORIES

HEAT-RESISTANCE GLOVES

NTN Part number - TLS-HEATRESGLVE

Size: 10.5 Material: Kevlar®
Protective gloves for the safe handling of hot parts up to +350°C/662°F

up to +330°C/602°F
Resistant to tearing, abrasion, and cuts.
Non-flammable and provides a high level of protection from conductive and convective heat.

Kevlar® is a registered trademark of E. I. du Pont de Nemours and Company

LASER TEMP 301 INFRARED THERMOMETER

NTN Part number - TLS-LASERTEMP301

IR temp range: -50°C to +850°C / -58°F to 1562°F

Contact probe temp range: -50° C to $+440^{\circ}$ C / -58° F to 824° F Establish an initial diagnosis of how machines are operating with completely

safe and precise remote or contact temperature measurements.

High degree of precision using the laser targeting device, 30:1 distance to target ratio, and adjustable emissivity from 0.1-1.

Measurements in less than 1 sec. Internal memory records 20 measurements.

Back-lit display for easy reading.

Supplied with type K thermocouple wire probe (length 1 m), protective pouch, and user manual

Principle

0 50 mm

0 550 mm

0 350 mm

1500 mm

1500 mm

Distance / Target

User manual.

Principle

TARGETING DEVICE