QUALITY GUARANTEE & WARRANTY

KENNEDY TOOLS carry a one year manufacturers warranty.

KENNEDY TOOLS are designed & manufactured to the highest standards & specifications.
Assuring the quality and performance required by all sectors of industry.

KENNEDY TOOLS are fully guaranteed against faulty materials & workmanship.
Should they be found to be defective, they will either be repaired or replaced free of charge (fair wear and tear and/or misuse excepted).

Please retain supplier invoice as proof of purchase.

E C MACHINERY DIRECTIVE 2006/42/EC
DECLARATION OF CONFORMITY

We hereby certify that the KENNEDY Body Repair Kits Models BRK004 and BRK010 comply with all the relevant provisions of the EC Directive 98/37/EC (The Machinery Directive of the Council of European Communities)

Harmonised Standards Applied: EN 150 4413: 2010.

Manufactured for
KENNEDY TOOLS
Wigston Works, Leicester, England, LE18 2FS.

www.kennedy-tools.co.uk

Supplied by an ISO9001 approved company.

Signed:
Date: 1st January 2004
Name: Keith Read
Position: Director, The Kennedy Group Ltd.

CE

AVAILABLE FROM YOUR DISTRIBUTOR

KENNEDY TOOLS
Wigston Works, Leicester, England, LE18 2FS
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Supplied by an ISO9001 approved company

KENNEDY®
QUALITY INDUSTRIAL TOOLING

BODY REPAIR KIT

MODEL BRK004
KEN-503-7240K
4 TONNE

MODEL BRK010
KEN-503-7260K
10 TONNE

- Used for clamping, pulling, bending, straightening, spreading and lifting operations.
- Snaps together quickly.
- Heavy duty hand pump has automatic overload feature.
- Tough blow moulded case.
- Strong flexible hose with spring guards at both ends.
- Hydraulic hand pump, ram and spreader.



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CE

INSTRUCTION MANUAL

KENNEDY **thoroughly recommends reading these instructions before using the Body Repair Kit, even if you have used a Body Repair Kit on a vehicle before. Reading these instructions carefully and understanding them fully will enable you to perform collision repair on a vehicle correctly and will prevent injury to yourself or someone else as well as prevent damage to the vehicle and equipment.**

SAFETY GUIDELINES

- Always use approved eye and face protection. If necessary also wear protective gloves.
- Avoid kinks in the hose and inspect it each time before use.
- Before use, bleed the hand pump to release any trapped air.
- Do not modify in any way.
- Do not operate the body repair kit if any parts are missing, damaged or faulty.
- Do not operate the body repair kit when you are tired, under the influence of alcohol, drugs or intoxicating medication.
- Keep children and unauthorised people away from the work area.
- The body repair kit is intended for use by qualified mechanics who are familiar with its use.

- Do not drop any heavy objects onto the hose.
- Do not exceed the rated load capacity. The hydraulic spreader ram has a ½ Tonne (500kg) capacity.
- Do not force the body repair kit.
- Do not overreach.
- Do not stand on the body repair kit.
- Keep the body repair kit away from heat.
- Make sure the lift point is stable and properly centred on the ram.
- Refill with hydraulic fluid only, making sure no dirt gets into the hydraulic system. Do not use brake fluid.
- Stay alert at all times.
- Wear proper clothing.

- Do not allow the body repair kit to get wet or remain in a damp environment.
- Replace the dust caps back onto the couplings after use.
- Store in a secure, dry place, out of reach from children.
- When not in use, release the pressure from the pump.

CAPACITIES

Model Number	Hand Pump PSI	Ram (Kg/Tonne)	Spreader (Kg/Tonne)	Weight (Kg)	Order Code **KEN-503**
BRK004	10,000	4,000/4	500/0.5	12.0	**-7240K**
BRK010	10,000	10,000/10	500/0.5	36.5	**-7260K**

1 tonne (metric ton or t) = 1000Kg *1 ton (imperial ton) = 2240lbs (1016Kg)*

Please note:

a) That the load capacity of the hydraulic spreader ram is ½ tonne for both the BRK004 and BRK010.

b) That the load capacity of the hydraulic ram is affected when extension rods are used. Please see page 5 for details.

SPARES

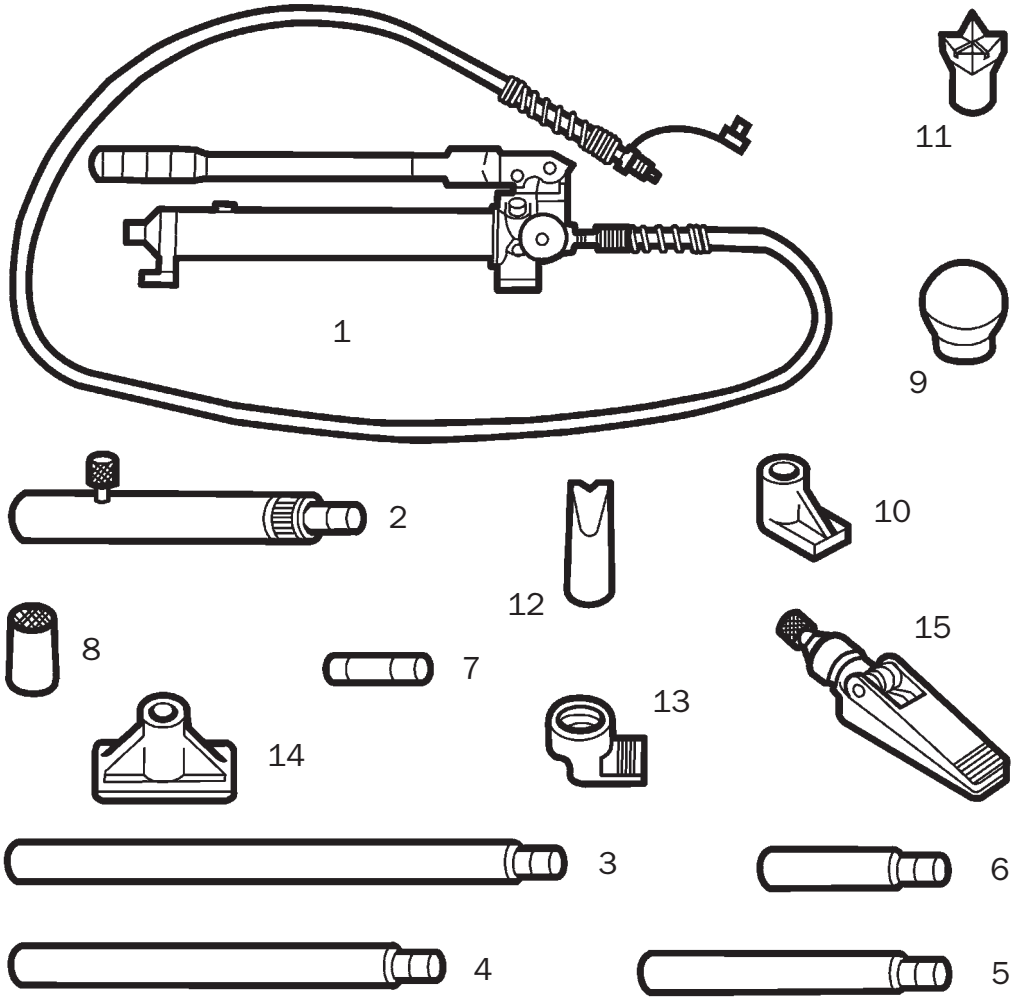
		4 TONNE 22mm Bore Diameter	10 TONNE 33mm Bore Diameter
	Hand Pump	KEN-503-8800K	KEN-503-8820K
	Push Ram	KEN-503-7170K	KEN-503-7190K
	Spreader Ram	KEN-567-8240K	KEN-567-8240K
	Extension Tube	100mm (4”) KEN-567-8280K	125mm (5”) KEN-567-8420K
	Extension Tube	200mm (8”) KEN-567-8290K	250mm (10”) KEN-567-8430K
	Extension Tube	305mm (12”) KEN-567-8300K	355mm (14”) KEN-567-8440K
	Extension Tube	410mm (16”) KEN-567-8310K	480mm (19”) KEN-567-8450K
	Double Ended Male Snap Connector	KEN-567-8320K	KEN-567-8460K
	Flat Base	114x63mm KEN-567-8330K	150x95mm KEN-567-8470K
	90° “V” Base	KEN-567-8340K	KEN-567-8480K
	Wedge Head	KEN-567-8350K	KEN-567-8490K
	Spreader Plunger Toe	KEN-567-8360K	KEN-567-8500K
	Spreader Ram Toe	KEN-567-8370K	KEN-567-8510K
	Rubber Head	67mm Ø KEN-567-8380K	75mm Ø KEN-567-8520K
	Serrated Saddle	35mm KEN-567-8390K	46mm KEN-567-8530K
	Repair Kits (‘O’ rings & seals) — Push Ram	KEN-567-8000K	KEN-567-8020K
	Repair Kits (‘O’ rings & seals) — Hand Pump	KEN-567-8050K	KEN-567-8060K
	150cm/5ft hose with fitted coupler. ¼” NPT at both ends. Suitable for single speed hand pumps.	KEN-567-8120K	KEN-567-8120K

TROUBLE SHOOTING

To prevent personal injury, release the pump pressure and disconnect the hose from the pump before making any repairs. Repairs must be performed in a dirt-free environment by a qualified person who is familiar with this type of equipment.

FAULT	POSSIBLE CAUSE	SOLUTION
Pump loses pressure.	1.System components leaking.	1. Repair or replace as necessary.
Pump not delivering oil.	1. Low oil level in reservoir. 2. Seats are worn.	1. Check oil level. 2. Repair seats or replace pump body.
Pump does not reach rated capacity.	1. Low oil level in reservoir. 2. System components leaking. 3. Fluid leaking past inlet or outlet check valves.	1. Check oil level. 2. Repair or replace as necessary. 3. Repair inlet or outlet check valves, or replace high pressure piston seal.
Pump handle has 'spongy' feel.	1. Air trapped in system. 2. Too much oil in reservoir.	1. Refer to 'bleeding air from the system' on page 4. 2. Check oil level.
Ram piston will not extend.	1. Loose couplers. 2. Low oil level in pump reservoir. 3. Ram seals leaking.	1. Tighten couplers. 2. Fill and bleed the system. 3. Replace worn seals. Look for excessive contamination or wear.
Ram system extends only partially.	1. Low oil level in pump reservoir. 2. The load exceeds the capacity of the system.	1. Fill and bleed the system. 2. Use correct equipment.
Ram piston extends slower than normal.	1. Loose couplers. 2. Restricted hydraulic line or fitting. 3. Pump not working correctly. 4. Ram seals leaking.	1. Tighten couplers. 2. Clean and replace if damaged. 3. Repair or replace as necessary. 4. Replace worn seals. Look for excessive contamination or wear.
Ram does not hold pressure.	1. Leaky connection. 2. Ram seals leaking. 3. Pump or valve not working correctly.	1. Clean, reseal with thread sealant and tighten connection. 2. Replace worn seals. Look for excessive contamination or wear. Replace contaminated oil. 3. Repair or replace as necessary.
Ram leaks hydraulic oil.	1. Worn or damaged seals. 2. Loose connection.	1. Replace worn seals. Look for excessive contamination or wear. Replace contaminated oil. 2. Clean, reseal with thread sealant, and tighten connection.
Ram will not retract or retracts slower than normal.	1. Pump release valve closed. 2. Loose couplers. 3. Blocked hydraulic lines. 4. Weak or broken retraction springs. 5. The ram is damaged internally. 6. The pump reservoir is too full.	1. Open the pump release valve. 2. Tighten the couplers. 3. Clean and flush the lines. 4. Send to a service centre for repair. 5. Send to a service centre for repair. 6. Drain the oil to the correct level.

CONTENTS



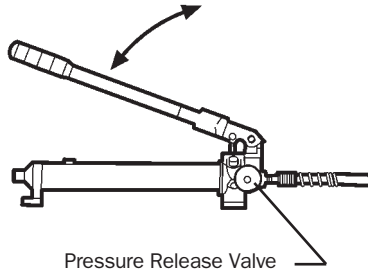
		4 TONNE KIT	10 TONNE KIT
1	Hand Pump	10,000 PSI	10,000 PSI
2	Hydraulic Ram	100mm/4" Stroke	150mm/6" Stroke
3	Extension Tube	410mm/16"	480mm/19"
4	Extension Tube	305mm/12"	355mm/14"
5	Extension Tube	200mm/8"	250mm/10"
6	Extension Tube	100mm/4"	125mm/5"
7	Double End Male Snap Connector	-	-
8	Serrated Saddle	35mm	46mm
9	Rubber Head	67mm ∅	75mm ∅
10	Spreader Plunger Toe	-	-
11	90° "V" Base	-	-
12	Wedge Head	-	-
13	Spreader Ram Toe	-	-
14	Flat Base	114x63mm	150x95mm
15	Hydraulic Spreader Ram	½ Tonne	½ Tonne

OPERATING

To pressurise the hydraulic hand pump, turn the release valve on the side of the pump clockwise to close the valve. Then pump the handle up and down.

To release pressure, open the valve by turning the release valve anti-clockwise.

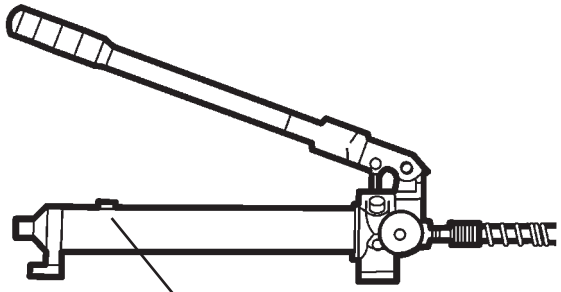
The hand pump can be used in any position. When using the hand pump in a vertical position, always ensure that the hose end is facing downwards.



CARE & MAINTENANCE

CHECKING & FILLING THE OIL RESERVOIR:

1. Place the hydraulic hand pump on a level surface and disconnect any attachment from the end.
2. Always follow the precautions advised by the oil manufacturer.
3. Open the pressure release valve.
4. Remove the filler plug from the cylinder. The oil should be within 15mm from the top of the reservoir.
   If necessary, fill with hydraulic oil **ISO VG.22.32** until the oil is within 15mm from the top of reservoir. DO NOT USE BRAKE FLUID.
5. Pump the handle 5 or 6 times to expel air.
6. Screw on the filler plug.



Avoid mixing different grades of oil. After long periods of use, the oil should be replaced with new oil.

BLEEDING THE SYSTEM:

Air can accumulate in the hydraulic system during the initial setup or after prolonged use, causing the ram to respond slowly or in an unstable manner. To remove the air, please follow these steps.

1. Place the ram at a lower level than the pump, with the piston end pointing down.
2. Extend and retract the ram several times without putting a load on the system. Air will be released into the pump reservoir.
3. With the ram fully retracted, the pump sitting level and no pressure in the hydraulic system, remove the pump's filler screw.
4. Pump the handle 5 or 6 times to bleed air out of the system.
5. Close the pressure release valve.
6. Replace the filler plug screw.

LUBRICATING:

Use light oil on all moving parts.

WHEN NOT IN USE:

Wipe clean with a slightly oiled cloth and store in the protective case. Store with the release valve open. Make sure that the threaded dust cap plugs are put on to the ends of the hose, hydraulic ram and hydraulic spreader ram, to avoid dirt from entering the system.

APPLICATIONS AND LOAD CAPACITY

Adding two extension rods to the hydraulic ram will make the capacity reduce by 50%. When the load is off centre the capacity will be reduced by a further 50% and each additional single extension will reduce the capacity by a further 50%. If connecting more than two extensions together, ensure that the short extension is positioned the furthest away from the hydraulic ram.

