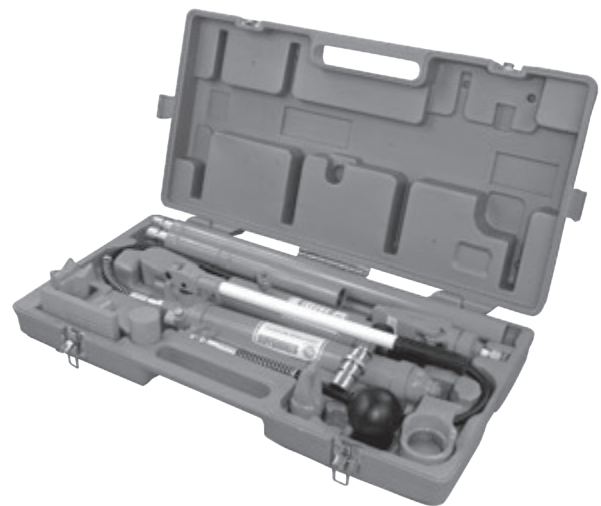


4 & 10 Ton Body Repair Kit *Owner's Manual*



WARNING:

Read all instructions and safety warnings before operating this equipment. Failure to follow the instructions and safety warnings may result in personal injury or property damage.



WARNING!

The use of shop equipment is subject to certain hazards that cannot be prevented by mechanical means, but only by exercise of intelligence, care, and common sense. It is therefore essential to have personnel involved in the use and operation of equipment who are careful, competent, trained, and qualified in the safe operation of this equipment and its proper use. Examples of hazards are dropping, tipping, or slipping of parts/components caused primarily by improperly securing loads, overloading, off-centered loads, use on other than hard level surfaces, and using equipment for a purpose for which it was not designed.

The owner and / or operator shall study and understand the product and safety instructions before operating this equipment. Safety information shall be emphasized and understood. If the operator is not fluent in English, the product and safety instructions shall be read to and discussed with the operator in the operator's native language by the purchaser / owner or his designee, making sure that the operator comprehends their contents. A copy of these instructions / warnings shall be retained for future reference.

- It is the responsibility of the owner of this kit to ensure it is being used in accordance with all OSHA, provincial, and local safety regulations. Always wear protective eye wear when working with this piece of equipment.
- **Do Not** use beyond rated capacity. **IMPORTANT:** The rated capacity of this repair kit is affected and can be reduced depending on the attachments used. Wedge rams are rated at 1/2 ton capacity. When using extension tubes, each tube used reduces the capacity by 50%. For example if one extension tube is used the capacity is 50%. When using the Ram Toe and Plunger Toe capacity is reduced to 50% of ram capacity. Maximum Rubber Head capacity is 0.5 Ton for the 030202 4 Ton unit and 1.0 Ton for the 030207 - 10 Ton unit. (see chart below) Use only adapters / extensions provided with the unit.
- Always position the shortest extension tube farthest away from the ram in a multiple tube setup.
- **Do Not** use this equipment as a vehicle lifting device or as a vehicle support
- **Do Not** subject the hose to extreme cold, heat sharp surfaces, abrasion, or impact.
- Ensure the hose is free of obstructions, and is in a straight line or arc, do not operate the pump with the hose bent sharply.
- **Do not operate the pump when the ram reaches full extension, operating the pump with the ram at full extension could cause damage to the ram and/or personal injury.**
- **Never** operate the pump with release valve closed and hose disconnected from ram, this will pressurize the hose and connections, possibly causing a burst condition and damage to the pump, hose and / or personal injury.
- Check the hose and connections often for leaks or damage. Prevent the hose from being pinched, cut or having heavy objects fall onto the hose. If a leak occurs, the ram will retract, if the hose is cut, the setup will immediately lose pressure.
- No alterations or modifications shall be made to this product.
- **Do Not** carry the pump / ram assembly by the hose.
- **STOP and Check** to ensure the setup is stable prior to starting any work, as well as **CHECK OFTEN** that the setup remains stable during any work being performed. Operate the pump slowly, while at the same time watching the ram and points of contact to ensure the operation is safe and secure.
- Failure to heed these warnings may result in personal injury, property damage or both.



INSPECTION

Visual inspection shall be made before each use of this equipment, checking for abnormal conditions, such as cracked welds, leaks, damaged, loose or missing parts. This equipment shall be removed immediately from service if it is believed to have been subjected to an abnormal or shock load, the equipment shall be inspected by a qualified repair facility. Owners and / or operators should be aware that repair of this equipment may require specialized knowledge and facilities. It is recommended that this equipment be inspected annually by a qualified repair facility. Defective parts, decals, safety labels or signs should be replaced with Strongarm specified parts.



SETUP

The hydraulic hose is shipped attached to the pump, with a threaded male connector at the opposite end to the pump. Attach the male connector to the female connector on the ram and screw the threaded collar all the way onto the male threads and hand tighten. Ensure ram is fully retracted before detaching hose from ram.

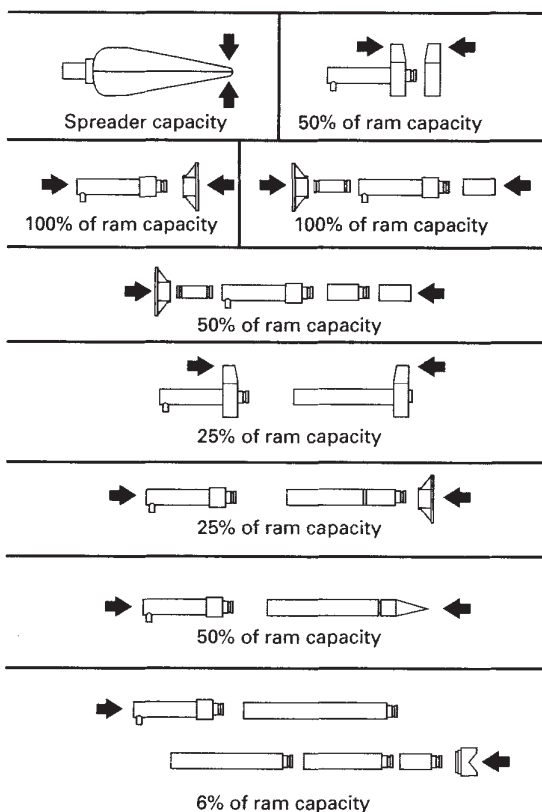
AIR PURGE

From time to time, air may enter the hydraulic system and will need to be purged. Evidence of air in the system is a “spongy” feel when pumping or an incomplete stroke on the pump.

Turn the release valve counterclockwise by 1-1/2 turns. With ram fully retracted and release valve open, pump the handle 10-20 times

It is recommended to use a pressure gauge to monitor the pressure when using components that reduce the capacity of the unit.

Fig. 7-1.3-3 Standard Kit Set for Applying Force



Pressure Gauge

030285 – Pressure Gauge c/w adapter Block

NOTE: When adding threaded components to this hydraulic system be sure to use a good quality hydraulic thread sealant.

The Capacity chart on the left indicates reduction in overall capacity based on various extension and adapter configurations.



OPERATING INSTRUCTIONS

- A. This kit is designed for the following applications, spreading, bending, stretching, pulling, clamping, pushing, lifting, pressing and straightening.
- B. Inspect all components prior to using, if any damage, leaking or excessive wear is found, repair or replace prior to using. Hoses should be free from cuts or crimps, all connections to pump and ram should be tight. Keep protective ring on ram when not using threads on the ram.
- C. The pump can be used flat, or vertical provided the hose is pointing down.
- D. The ram can be used in any position, provided the setup is safe and stable.
 - 1) Open the breather valve (valve should be closed when transporting the unit).
 - 2) Close the release valve by rotating it clockwise until finger tight.
 - 2) Position and secure the ram and extensions / adapters to be used in such a manner that the setup is stable and will operate in a safe manner.
 - 3) Slowly operate the pump handle until the setup meets the load, double check that the setup is secure.
 - 4) Operate the pump, observing the pressure gauge to ensure not to exceed maximum operating pressure for specific load and setup. If the setup becomes unstable, stop pumping and slowly release the pressure by rotating the release valve counterclockwise. Re-position ram and extensions / adapters to a safer setup.
 - 5) When releasing pressure, **SLOWLY** rotate the release valve counterclockwise, (**never more than one turn**) while **observing the setup** for instability.

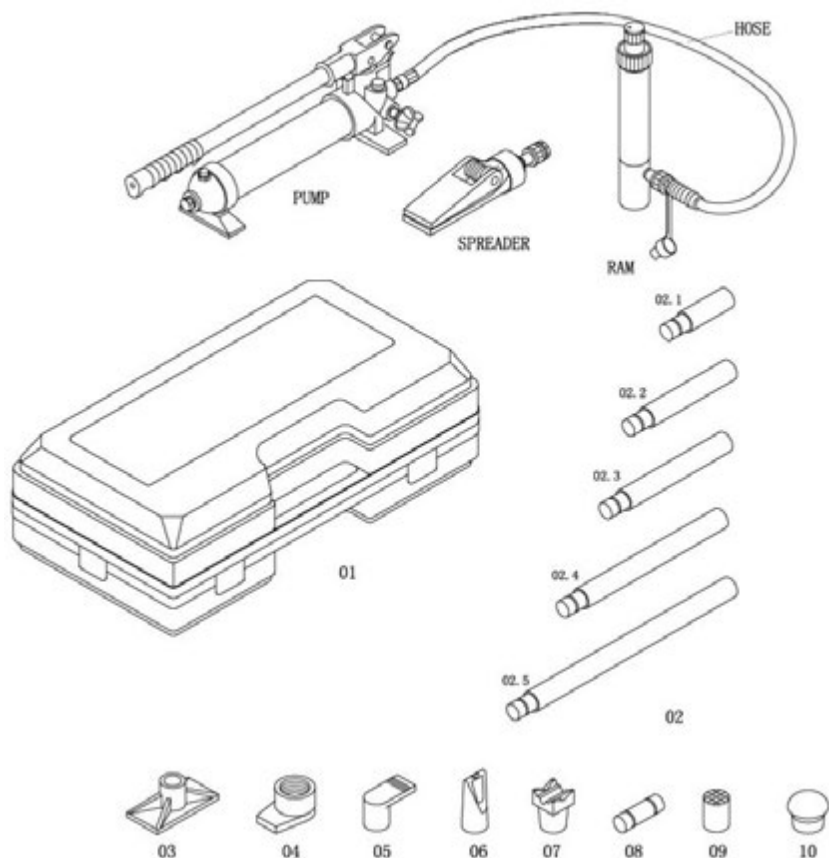


MAINTENANCE

- 1) Store ram in retracted state to protect from damage and corrosion.
- 2) Protect components from corrosive chemicals, dirt, or damage by storing in a clean protected area.
- 3) Use plastic threaded coupler protectors on ram and hose connectors when not in use.
- 4) Replace Hydraulic Oil annually with a High Grade Hydraulic Oil, never use alcohol, brake fluid or transmission oil.
 - 030202 - 4 Ton - Oil Capacity = 350ml
 - 030207 - 10 Ton - Oil Capacity = 500ml
- 5) Periodically check the ram and pump piston for signs of rust, clean exposed areas with a clean oiled cloth. Always ensure setup contact points are free of oil and debris.
- 6) Repairs should only be performed by a qualified hydraulic repair technician.

PRODUCT NUMBERS 030202, 030207

MODEL NUMBERS BRK4T 4 TON BODY REPAIR KIT, BRK10T 10 TON BODY REPAIR KIT



BRK4PH PUMP/HOSE #030283

BRK4RAM 4 TON RAM #030241

BRK10PH PUMP/HOSE #030284

BRK10RAM 10 TON RAM #030242

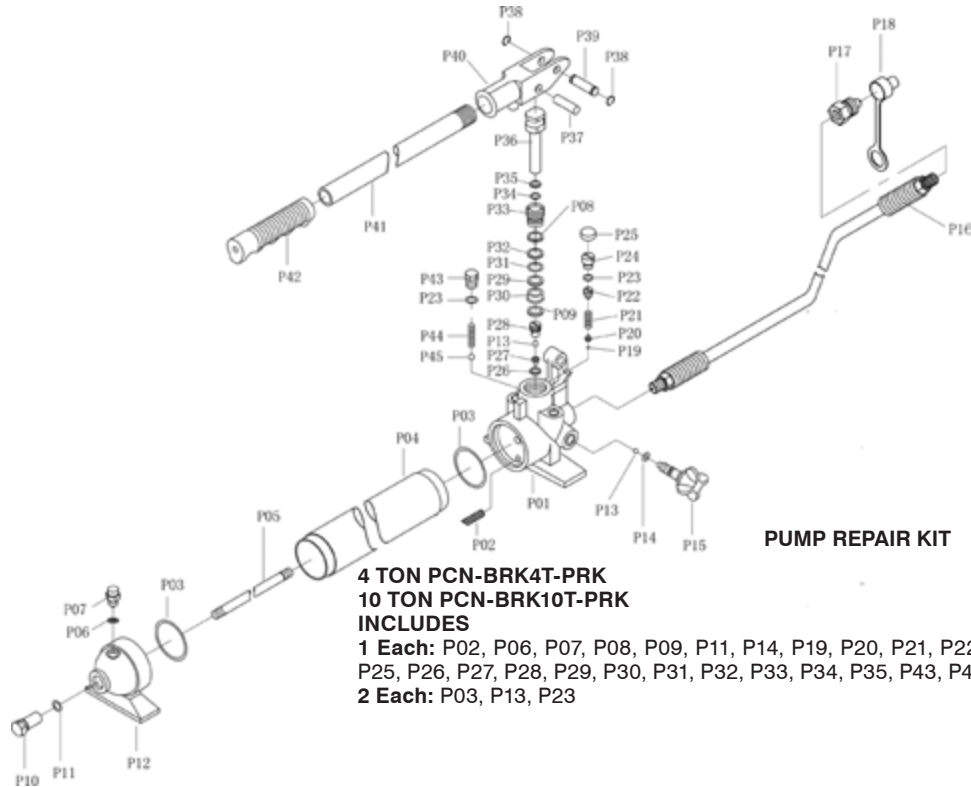
BRKSPRAM 1/2 TON SPREADER #030230

BRKH - HOSE #030292

PART NUMBER	DESCRIPTION
PCN-BRK4T-01	CASE 4 TON PLASTIC
PCN-BRK4T-02.1	EXTENSION TUBE I
PCN-BRK4T-02.2	EXTENSION TUBE II
PCN-BRK4T-02.3	EXTENSION TUBE III
PCN-BRK4T-02.4	EXTENSION TUBE IV
PCN-BRK4T-02.5	EXTENSION TUBE V
PCN-BRK4T-03	FLAT BASE
PCN-BRK4T-04	RAM TOE
PCN-BRK4T-05	PLUNGER TOE
PCN-BRK4T-06	WEDGE HEAD
PCN-BRK4T-07	V-BASE
PCN-BRK4T-08	MALE CONNECT
PCN-BRK4T-09	SERRATED SADDLE
PCN-BRK4T-10	RUBBER HEAD
PCN-BRK10T-01	CASE 10TON PLASTIC
PCN-BRK10T-02.1	EXTENSION TUBE I
PCN-BRK10T-02.2	EXTENSION TUBE II
PCN-BRK10T-02.3	EXTENSION TUBE III
PCN-BRK10T-02.4	EXTENSION TUBE IV
PCN-BRK10T-03	FLAT BASE
PCN-BRK10T-04	RAM TOE
PCN-BRK10T-05	PLUNGER TOE
PCN-BRK10T-06	WEDGE HEAD
PCN-BRK10T-07	V-BASE
PCN-BRK10T-08	MALE CONNECT
PCN-BRK10T-09	SERRATED SADDLE
PCN-BRK10T-10	RUBBER HEAD

PRODUCT NUMBERS 030202, 030207

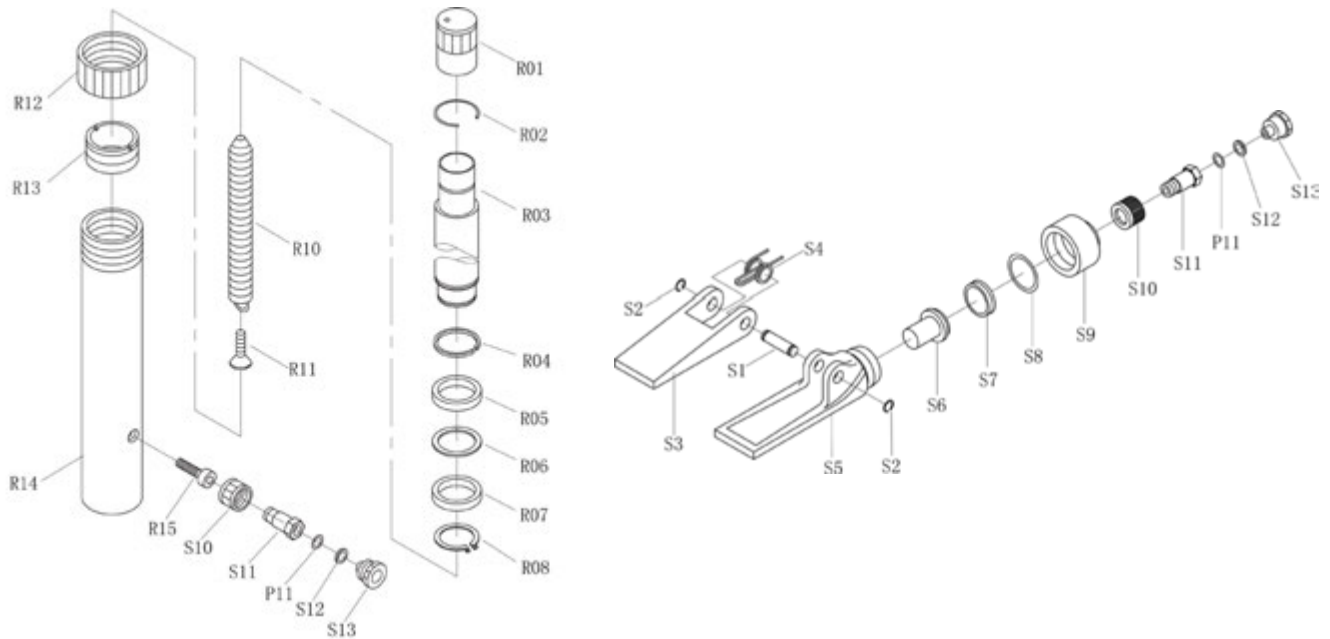
MODEL NUMBERS BRK4T 4 TON BODY REPAIR KIT, BRK10T 10 TON BODY REPAIR KIT



PUMP REPAIR KIT

**4 TON PCN-BRK4T-PRK
10 TON PCN-BRK10T-PRK
INCLUDES**

1 Each: P02, P06, P07, P08, P09, P11, P14, P19, P20, P21, P22, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33, P34, P35, P43, P44, P45
2 Each: P03, P13, P23



PCN-BRK4T-FHC

**FEMALE HYDRAULIC COUPLER
INCLUDES:** S10, S11, P11, S12, S13

**4 TON KIT
PCN-BRK4T-RRK
10 TON KIT
PCN-BRK10T-RRK**

RAM REPAIR KIT INCLUDES:
R02, R04, R05, R06, R07, R08

PRODUCT NUMBERS 030202, 030207**MODEL NUMBERS BRK4T 4 TON BODY REPAIR KIT, BRK10T 10 TON BODY REPAIR KIT**

PART NUMBER	DESCRIPTION
HYD RAM	
PCN-BRK4T-R01	COVER
PCN-BRK4T-R12	PROTECTION CAP
	SPREADER/PUMP
PCN-BRK4T-P17	COUPLER
PCN-BRK4T-P18	DUST COVER
PCN-BRK4T-P15	RELEASE VALVE
PCN-BRK4T-P41	HANDLE WITH GRIP
PCN-BRK4T-S4	SPRING
PCN-BRK4T-S9	END CAP
PCN-BRK4T-S8	O-RING
PCN-BRK4T-S7	CUP SEAL
PCN-BRK4T-S6	PISTON
PCN-BRK4T-S5	FIXED JAW
PCN-BRK4T-S3	MOVEABLE JAW
PCN-BRK4T-S1	PIN
PCN-BRK4T-S2	CIRCLIP
	HYDRAULIC RAM
PCN-BRK10T-R01	COVER
PCN-BRK10T-R12	PROTECTION CAP
	SPREADER/PUMP
PCN-BRK10T-P17	COUPLER
PCN-BRK10T-P18	DUST COVER
PCN-BRK10T-P15	RELEASE VALVE
PCN-BRK10T-P41	HANDLE WITH GRIP
PCN-BRK10T-S4	SPRING
PCN-BRK10T-S9	END CAP
PCN-BRK10T-S8	O-RING
PCN-BRK10T-S7	CUP SEAL
PCN-BRK10T-S6	PISTON
PCN-BRK10T-S5	FIXED JAW
PCN-BRK10T-S3	MOVEABLE JAW
PCN-BRK10T-S1	PIN
PCN-BRK10T-S2	CIRCLIP