

PELL CABLE CUTTER CO.

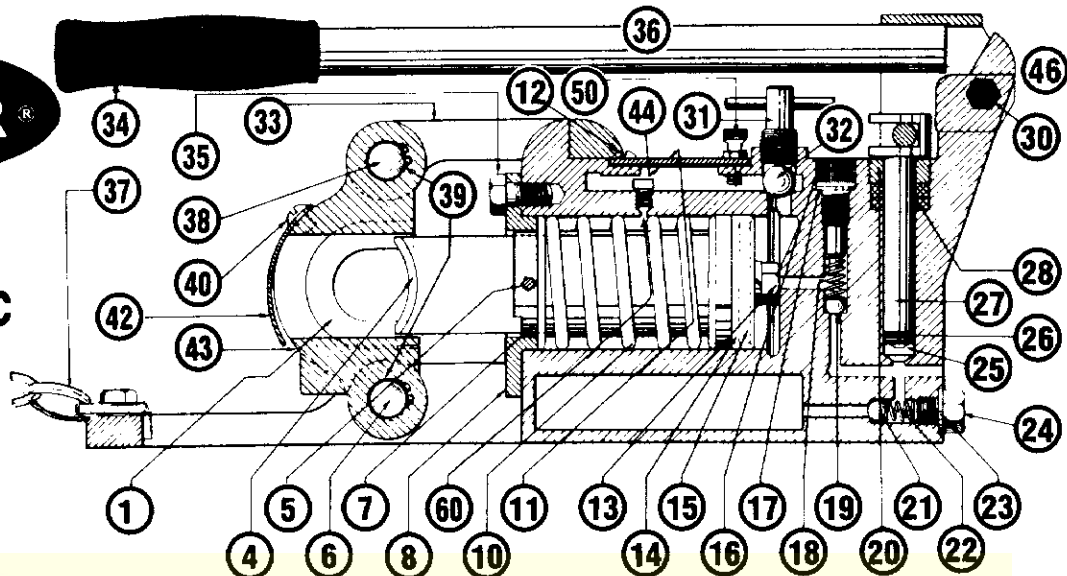
DIVISION OF MORSE-STARRETT PRODUCTS COMPANY

184 N.W. 10TH STREET • MERIDIAN, IDAHO 83642 • (208) 888-7571



MODELS W P C

Assembly Drawing



HYDRASHEAR REPLACEMENT PARTS

PART NO.	DESCRIPTION	MODEL W	MODEL P	MODEL C
1.	Die Set	W1	P1	C1
4.	Blade	W4	P4	C4
5.	Blade Pin	W5	P5	C5
6.	Hinge Pin w/#39	W6	P6	C6
7.	Ram	W7	P7	C7
8.	Ram Collar	W8	P8	C8
10.	Ram Retracting Spring	W10	P10	C10
11.	Cover Plate	W11	P11	C11
15.	Ram Cup Leather Retainer	W15	P15	C15
33.	Latch	W33	P33	C33
36.	Pump Handle	W36	P36	C36
38.	Latch Pin w/#39	W38	P38	C38
43.	Shear Blade Holder	W43	P43	C43
60.	Bypass Valve	N/A	P60	C60
61.	Standard Repair Kit	W61	P61	C61
62.	Overhaul Kit	W62	P62	C62

Items listed in the Standard Repair Kit and Overhaul Kit must be purchased in kit form only.

#61 STANDARD REPAIR KIT includes:

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|------------------------------|---------------------------|-------------------------|
| 14. Ram Cup Leather & o-ring | 21. Ball Suction Valve | 27. Plunger |
| 17. Check Valve Gasket | 22. Suction Valve Spring | 28. Plunger Packing Set |
| 18. Check Valve Spring | 23. Suction Valve Gasket | 32. Release Valve |
| 19. Ball Check Valve | 25. Plunger Packing Screw | 44. Cover Gasket |
| 20. Packing Nut | 26. Plunger End Packing | 47. Packing Nut Wrench |

#62 OVERHAUL KIT includes #61 Standard Repair Kit and all parts listed below:

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|----------------------------|----------------------------|-------------------------|
| 12. Cover Plate Screws (3) | 31. Release Valve Retainer | 40. Guard Screws (2) |
| 13. Ram Retainer Screw | 34. Handle Grip | 42. Guard Plate |
| 16. Check Valve Plug | 35. Ram Collar Screws (3) | 46. Lock Nut |
| 24. Suction Valve Plug | 37. Bail | 50. Air Vent Valve |
| 30. Handle Hinge Bolt | 39. Snap Rings (4) | 61. Standard Repair Kit |

OFFICE HOURS — 8:30 to 4:30 Monday through Friday MOUNTAIN TIME

Important:

This HYDRASHEAR is filled with oil and is ready for operation. When replacing oil, use any light, petroleum base oil, SAE 10 or equivalent.

DO NOT USE HYDRAULIC BRAKE FLUID OR COMPOUNDED OILS!

OPERATING:

1. Open Release Valve (#31) so Blade (#4) is at full retracted position.
2. Raise Latch (#33) and open Shear Blade Holder (#43). Place wire rope in Shear Blade and close Latch. If Latch will not close, Blade is not aligned to Shear Blade or Guides or the material to be cut is over size.
3. Tighten Release Valve (#31) and begin working Pump with short firm strokes. Release Valve must be tight. Use Extension Handle or if necessary tap with hammer, otherwise oil will bypass this valve and cause leakage.
4. After completing cut, open Release Valve (#31) and Blade will return to retracted position.
5. If Blade does not retract with Latch closed, pry back with claw bar, screw driver or other tool. **Do not pound with hammer!**

SERVICING:

- A. If Ram will not retract into cylinder, it probably has been burred or damaged so that it will not clear the Ram Collar. File off burrs to permit clearance.
- B. To sharpen or replace Blade, pump until Blade Pin (#5) is clear of Ram Collar—drive out Pin and Blade will lift out. To sharpen Blade use fine grinding wheel or carborundum stick. **DO NOT SHARPEN TO FINE EDGE.**
- C. To add oil, WIPE AWAY ALL LOOSE DIRT and remove Release Valve Retainer (#31). Pour in sufficient oil so that when pumping, Ram will travel to maximum position. When refilling, use only new clean oil.
- D. Should leakage of oil occur around Pump Plunger (#27), tighten Plunger Packing Nut (#20). If leakage continues, it may indicate that Plunger Packing (#28) or Plunger End Packing (#26) needs replacing.

E. If the blade in your HYDRASHEAR pulsates (that is, if the blade is forced out on the down stroke of the pump handle, but recedes on the up stroke) there may be some foreign material lodged under the Check Valve (#19).

1. Open up Release Valve (#31) until the blade has receded, close Release Valve (#31) tightly, raise pump handle about half way up and then strike it sharply downwards with the palm of your hand, or a bar. Raise it and strike it two or three times more, then proceed with normal pumping operation and in most cases this will flush out any foreign material.
2. Remove Check Valve and Spring and with Release Valve shut, take one or two strokes with the pump handle, which will pump some oil and usually any foreign material out of the Check Valve Hole. If this does not work, see G below.

F. If the blade will not pump entirely out, look for oil shortage, or there may be some foreign material lodged under the Suction Valve (#21).

G. If the blade will pump all the way out but will not build up pressure sufficient to cut, tighten the Release Valve Retainer (#31). If you still do not get required pressure, there may be some foreign material lodged under the Release Valve (#32). To correct any of the above, use following procedure: First remove the valve retainer, either #16, #24 or #31, also the springs #18 or #22. Insert a suitable sized punch or rod and lightly tap on the ball valve with a hammer. This will usually dislodge any foreign matter and reseal valve. If this does not work, it may be necessary to remove all oil and flush the HYDRASHEAR thoroughly, then refill with CLEAN oil. Should it become necessary to drain and refill, remove the cover plate and fill with oil until the cylinder is cov-

ered; push the release valve (#32) out of position and tip the HYDRASHEAR so the oil will run into the release valve hole. Hold in this position until the system has become entirely filled with oil, which will be indicated by the disappearance of any air bubbles. While in this position it may be desirable to take two or three strokes on the pump handle to further force any air out of the system.

H. If you feel you are having excessive blade breakage, carefully examine your Shear Blades. If the Shear Blades are cracked or broken, they permit small pieces of steel to wedge in between the Blade and Shear Blades and excessive blade breakage will occur. If the Shear Blades are broken or cracked, examine the Shear Blade Holder. Occasionally Shear Blade Holders are bent due to excessive pressure developed and especially so where the operator has attempted to cut solid bar stock. If at any time the Hinge or Latch Pins are bent, which is indicated by difficulty opening of the Shear Blade Holder, check for bent Shear Blade Holder. If the Shear Blade Holder is bent, excessive breakage of the Shear Blades will occur.

I. We use in the HYDRASHEAR a hollow split blade pin. In attempting to remove the Blade Pin, do not attempt to drive it out with the use of a nail or small piece of wire. Use a punch or a blunt object which will closely fit the Blade Pin Hole, which is 3.16" diameter. A nail is satisfactory if the point is cut off before attempting to use it.

IMPORTANT!

DO NOT continue to pump after wire has been cut through.

DO NOT continue to operate HYDRASHEAR, if it requires excessive effort. This HYDRASHEAR will cut any wire rope up to the maximum size which the Shear Blade will accept, with minimum effort. Hard pumping usually indicates a dull Blade. **A SHARP BLADE SELDOM BREAKS.**

DO NOT continue to use a blade that has been reground or resharpened to the extent that the back portion of the cutting edge will not enter the shear blade.