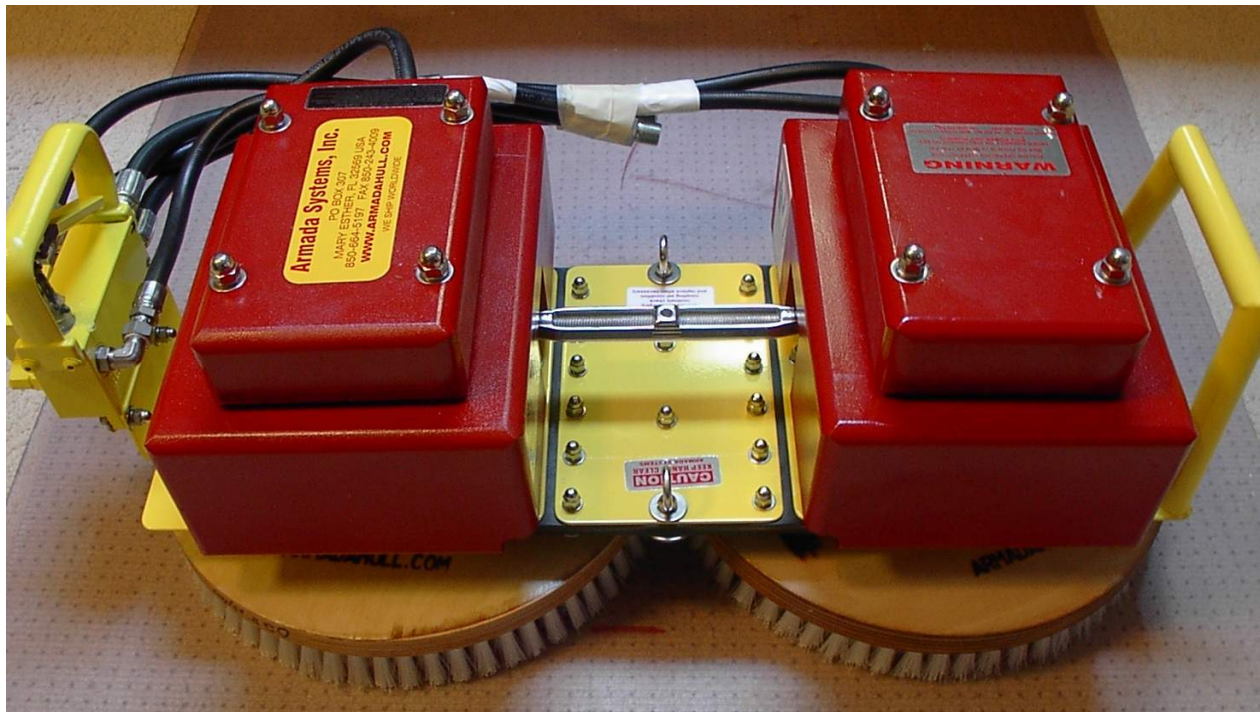
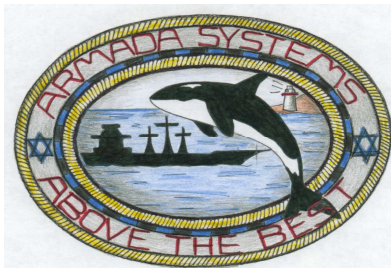


AS-T15 HB

**Underwater Commercial Pro-Line
Hydraulic Powered Twin Head Cleaning Unit**



Current production model may be different in appearance.



Armada Systems, Inc.
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Fax 850-243-4009
E-mail armadahull@aol.com
Web Address: www.armadahull.com

DANGER

**Never Connect or Disconnect
Hydraulic Tools with Power
Unit Engine Running.**

**This can only be done Safely
With Engine OFF.**

**Failure to comply will cause
Permanent damage to
Tool seals.**

**This voids all warranty of
Tool
And Hydraulic Power pack.**

AS-T15 HB Specifications & Standard Features:

READ BEFORE USE

Caution!! Never exceed 10 GPM and 1700 PSI
Maximum depth 60 Ft.

- Requires (2) Underwater Brush Diameter 15" OD.
- Safety Feature Deadman Switch
- Large trigger guard for easy control while wearing heavy diving gloves.
- Maximum Hydraulic Flow 10 GPM (gallon per minute)
- Maximum PSI 1700
- ♦ **Dimensions**
- ♦ Weight 72 lbs. Dry
- ♦ Height 16"
- ♦ Width 30"
- ♦ Length 19"

Oil leaking from shaft area is a indication that the GPM or PSI have been exceeded.

All brushes, barnacle attachments, hoses & power unit are sold separately as optional equipment.

MAINTENANCE



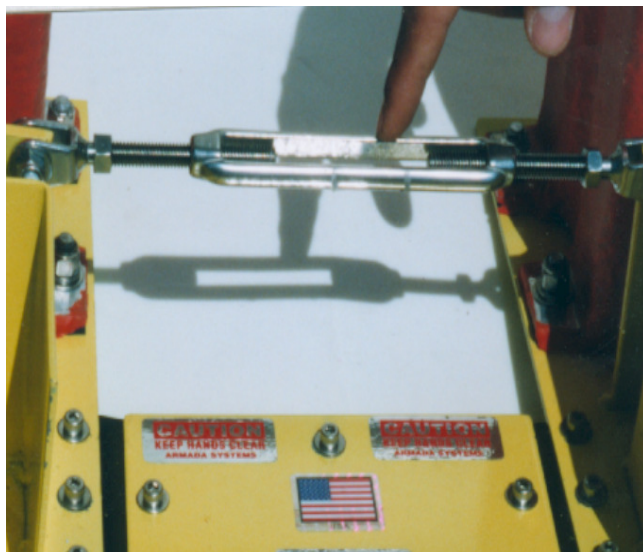
After tool is removed from water, it must be completely washed down with fresh water liberally. After washing with fresh water, immediately apply food grade oil lubricate spray. This is the only oil approved for use.

Penetrating oils will cause O ring damage and possible tool failure at sealed ports.

Use of this oil voids all warranties. Apply food grade oil to shaft seals liberally.

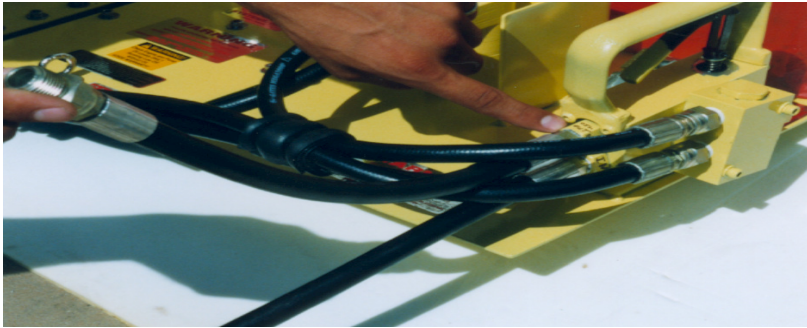
Apply food grade oil to trigger switch depression rod liberally.

Depress switch back and forth to lubricate. Lubricate all hydraulic connector ends.



Brush cambers can be adjusted by diver, to fit different surface contours to be cleaned. This camber adjusts the forward speed.



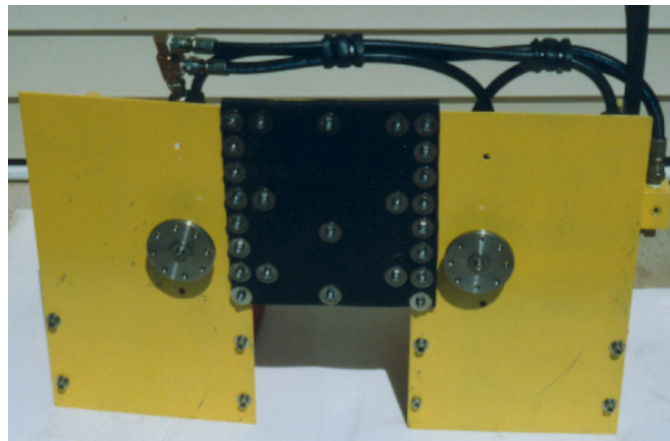


Return oil back to power unit is located at the top rear of the On/Off switch marked oil out. **Out Port**

Do Not Pickup or Carry Tool using the On/Off Trigger handle assembly. Use side stainless steel handle to maneuver, to lower tool in & out of Water, use eye bolt pickup.



Turn tool on side, rest on floats as shown, for removing or installing brushes.



Before installing QD's on tool hose whips, it is your responsibility to make sure oil inlet flow is directed to correct port. This is the lower connection port on the rear On/Off switch. **In Port**



Max GPM-10, Max PSI-1700
Never connect or disconnect hydraulic hoses with power unit running. This can cause pressure on shaft seals and voids all warranty.

Underwater Cleaning Brush & Inserts

Armada manufactures 15 different underwater brushes for various cleaning needs. Depending on the hull surface growth and condition (painted, unpainted, steel, fiberglass, etc.) brush inserts maybe required.

Barnacle cutter blade brush inserts (3 blades required with brush cutouts)

AS LPCB3 (Low profile cutter inserts)

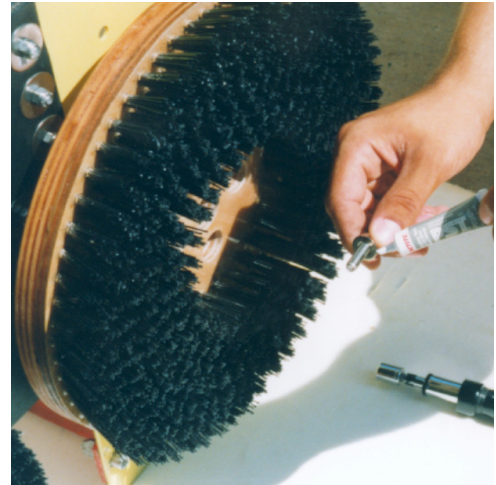
AS HPCB3 (High profile cutter inserts)

Blades are available on the following brushes: Stainless, Flat Wire, and Heavy Grit

Barnacle Brush Cutter Blades



Designed for removing barnacles, heavy grass, and zebra mussels for painted surfaces. U.S. Navy approved

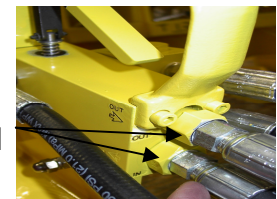
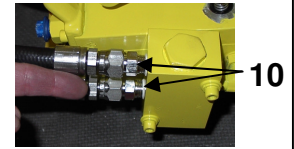
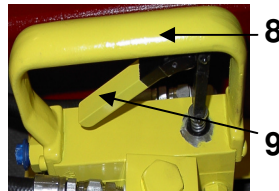
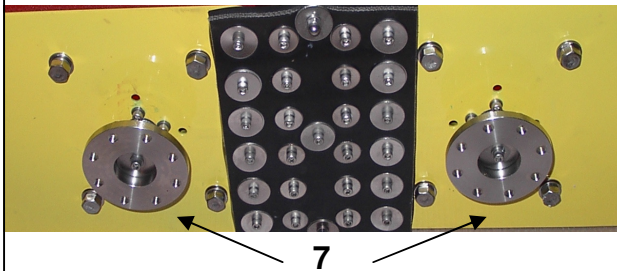
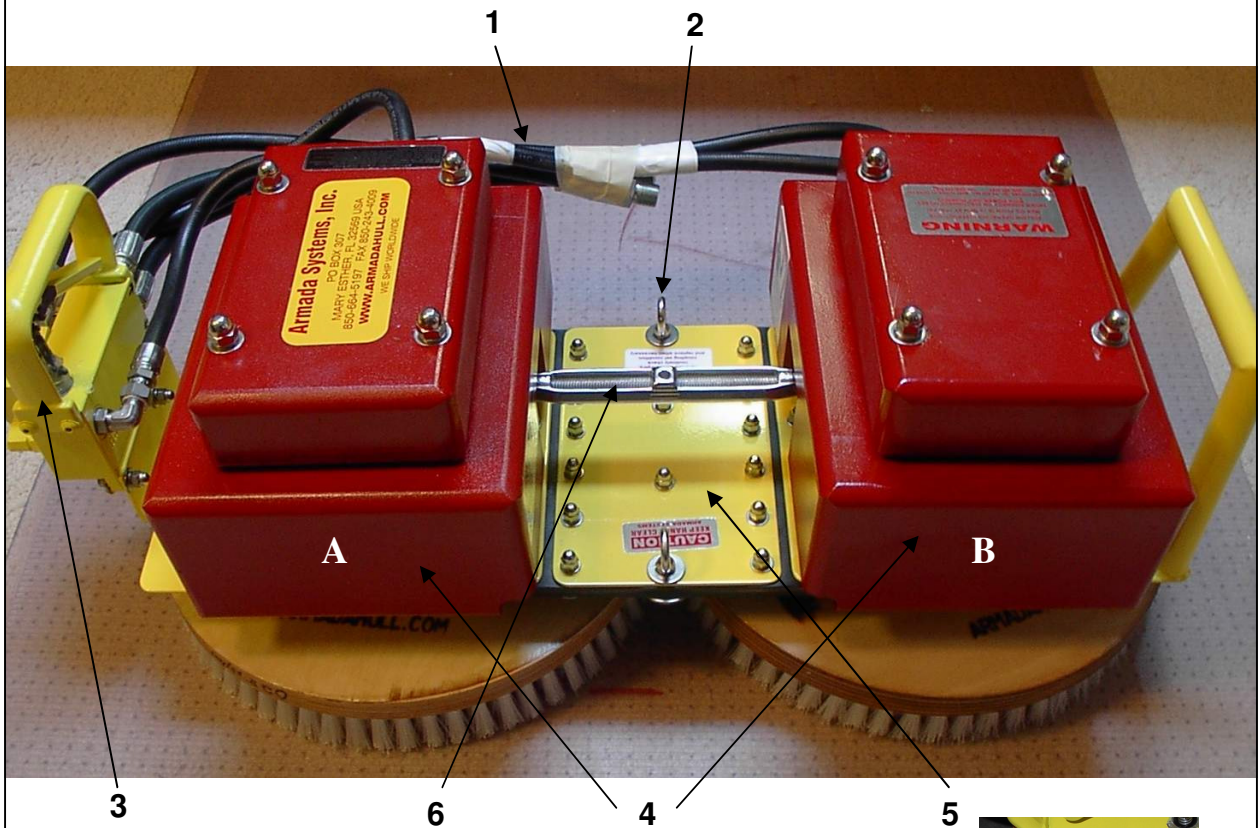


After every use rinse brushes with fresh water liberally. Keep brushes in a cool dry well ventilated area. If brushes are kept in a closed type container brushes will delaminated (separate). Keep out of direct sunlight while drying.

Armada's Underwater Brushes have a 4 hole bolt pattern. Armada's Drive Head has a total of 8 outside perimeter holes set up to match the brush pattern. The extra holes are in case one of the threaded holes become stripped out. You can simply turn the brush to the corresponding holes.

When installing brushes or changing, make sure brush bolts have washers and PST thread lubricate applied. Apply lubricate to brush bolt ends, this insures bolts do not seize and for easy removal. Start all bolts by hand making sure bolts are not cross threaded. Start all 4 bolts and do not tighten any bolts down until all 4 are started. Tighten all bolts with appropriate socket, alternating in a crisscross pattern. Never over tighten brush bolts, this will cause brush damage.

AS T15 HB Parts



1. Hose Assembly
2. Tool lifting Eyes
3. Deadman switch
4. Flotation Blocks (top flotation blocks are interchangeable)
5. Base plate frame
6. Turnbuckle
7. Drive Head
8. Deadman switch handle
9. Trigger assembly
10. High pressure motor supply lines
11. Hydraulic hose supply & return (top out/bottom in)
12. QD end protectors
13. Female QD
14. Male QD
15. Loctite 567 (use as thread sealant when assembling hoses)
16. Threaded hose ends
17. QD's and covers assembled on threaded hose ends



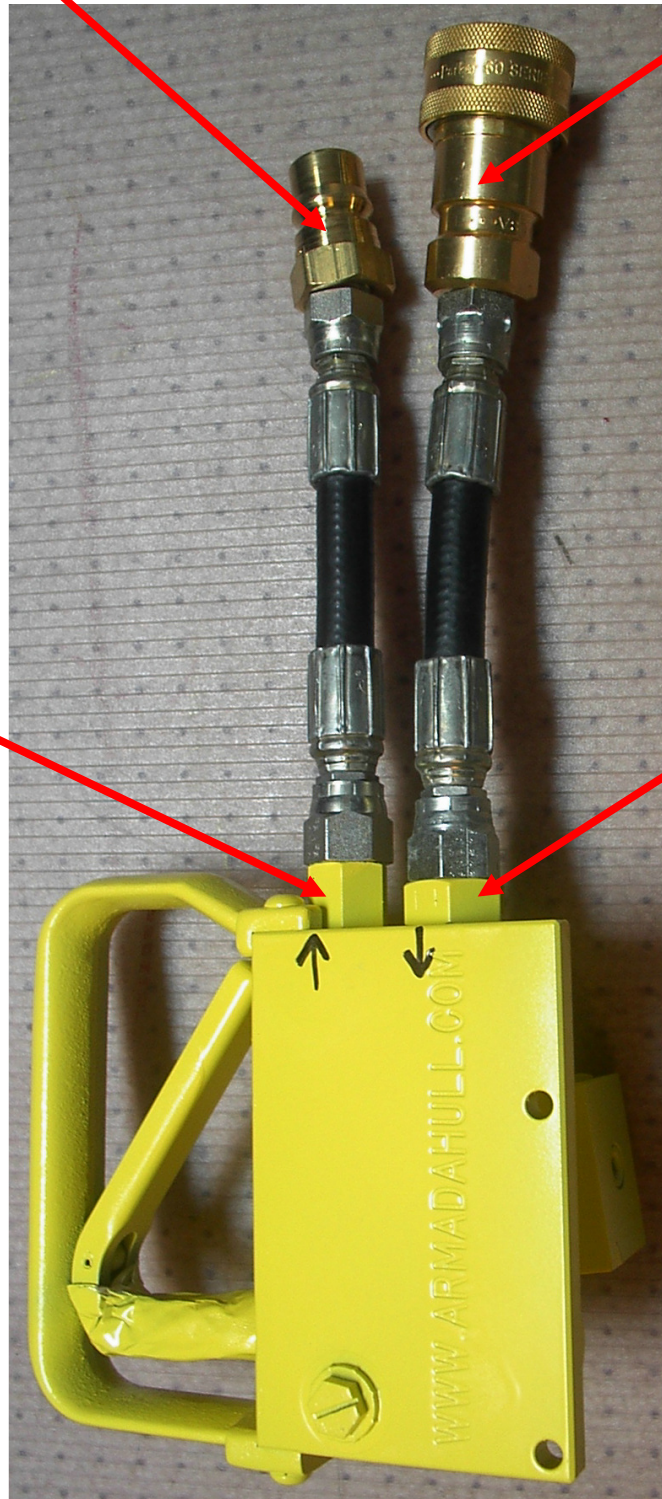
Deadman Trigger ON / OFF Switch

Oil Out of Switch
Return to Pump
Male Hydraulic Connector

Oil into Switch
Supply from Pump
Female Hydraulic Connector

Oil Out

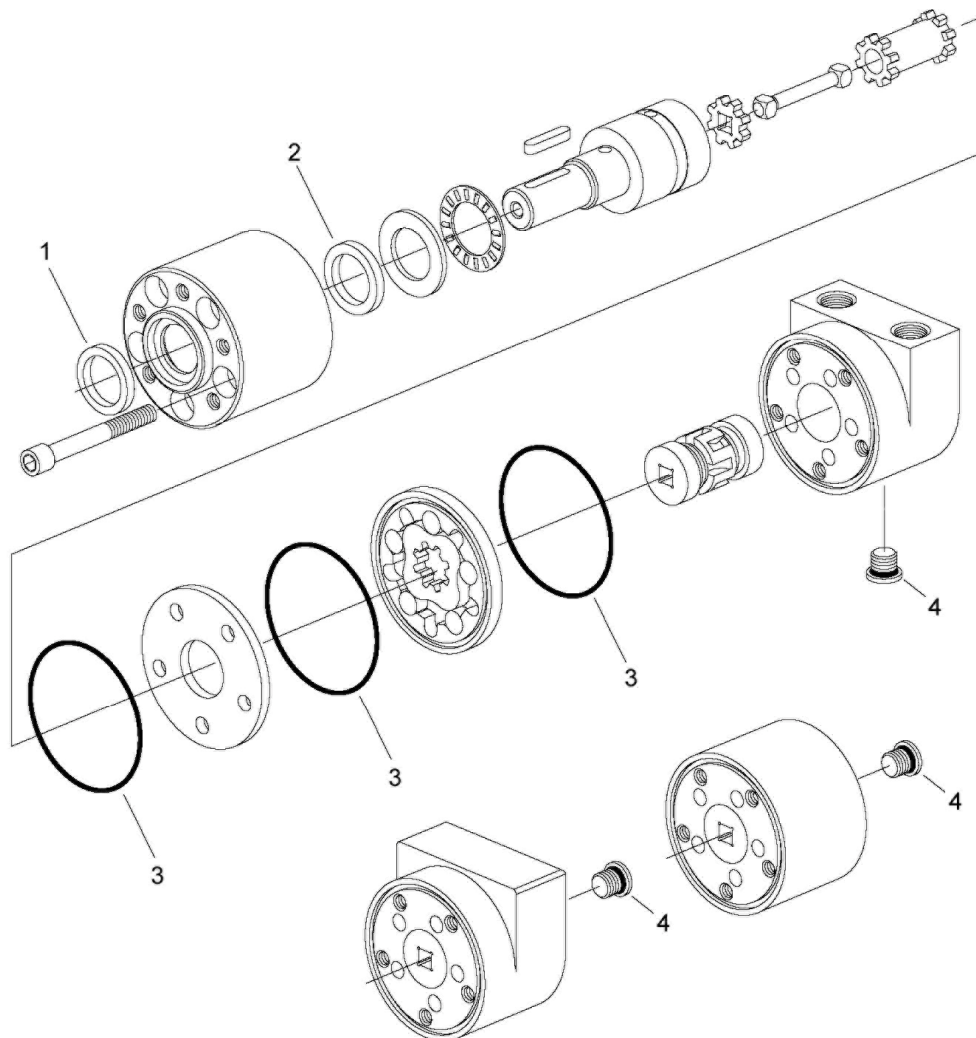
Oil In

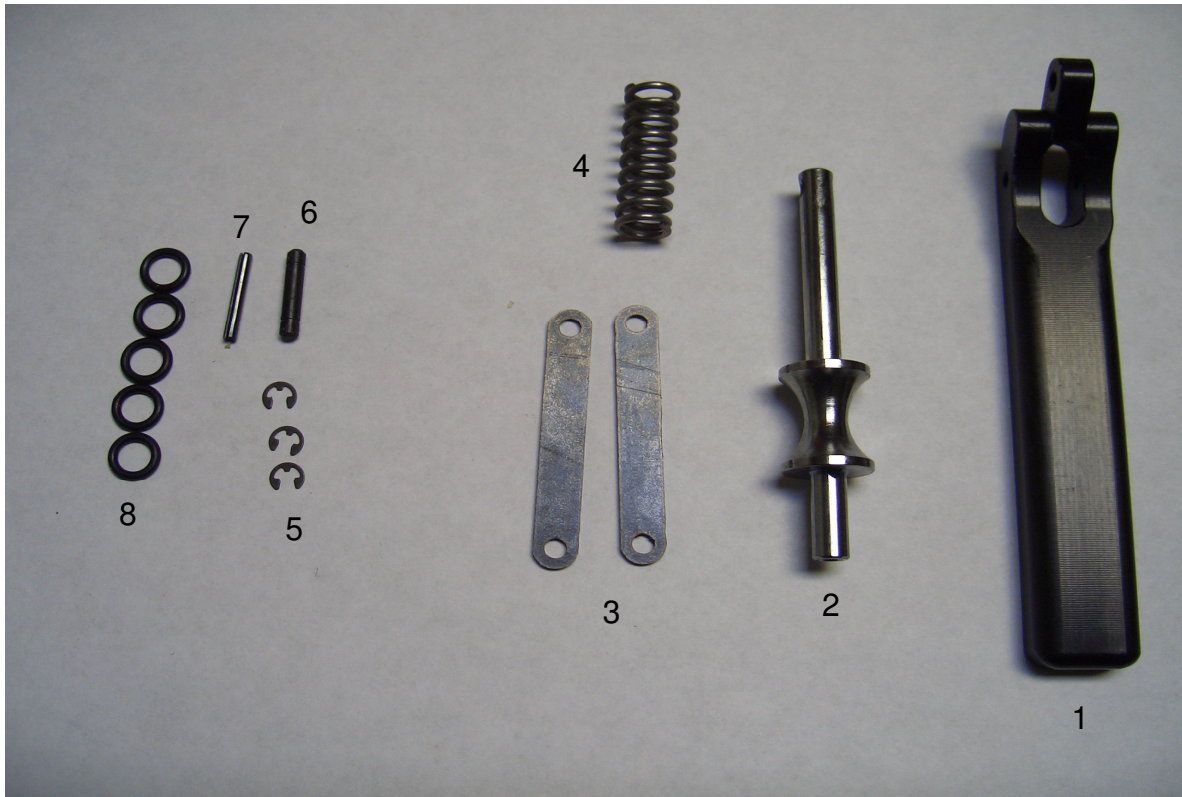


Armada Systems, Inc.
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Phone 850-664-5197/Fax 850-243-4009

Oil Retaining Motor Seal Kit

Ref No.	Description	Approx. Size for identification inch (mm)		Qty
1	Seal Exclusion	1.01 (25.7)	O.D.	1
2	Seal Pressure	1.01 (25.8)	O.D.	1
3	O-ring	2.08 (52.8)	I.D.	3
4	O-ring (3/8-24 Plug)	.30 (7.7)	I.D.	1
4	O-ring (M10 Plug)	.32 (8.2)	I.D.	1
4	Ring Seal* (G 1/8 (BSP) Plug)	.33 (8.4)	I.D.	1





1. trigger handle
2. plunger
3. plunger guide rails (2)
4. spring
5. clips (3)
6. pin
7. clip ring
8. o rings (5)

WARRANTY AND LIMITATION OF LIABILITY

WARRANTY

Armada Systems warrants to Purchase that the product(s) sold by Armada Systems shall be free from defects in material and workmanship for a period not to exceed 90 Days from date of purchase. **The foregoing warranty is exclusive; Armada Systems makes no implied warranty of merchantability or implied warranty of fitness for any particular purpose, and no other warranties, expressed or implied, concerning its products.**

Armada Systems warranty hereunder cannot be modified by any person or entity, including, without limitation, any distributor or retailer of Armada Systems products. The obligation of Armada Systems under this Warranty is limited to the repair or replacement of defective Product(s) for which Armada Systems issued a RGA number, at Armada Systems option, upon Purchaser's return of such product(s) to Armada Systems factory in Mary Esther, FL, freight prepaid. Armada Systems obligation to repair or replace defective product(s) hereunder shall arise only if (a) Armada System technician determines by inspection that such product(s) are defective in material or workmanship, (b) Armada Systems has received written notification from the Purchaser of the defect within the warranted time period and (c) Purchaser has notified Armada Systems in writing of the defect immediately upon discovery thereof. This warranty further shall not apply to any product which has been repaired or altered in any way by any person or entity other than Armada Systems, nor shall it apply to any product which has been subject to misuse, improper operating conditions, faulty installations, negligence or accidents.

LIMITATION OF LIABILITY

Except as otherwise agreed herein, Armada Systems shall not be liable for special, incidental or consequential damages arising out of the use of, or inability to use, any product sold by Armada Systems, including, without limitation, damage or loss of other property or equipment, loss of profits or revenue, or claims of customers of purchaser for any such damage or loss.

IMPORTANT

MAIL THIS SHEET TODAY TO REGISTER YOUR
UNIT FOR WARRANTY.

Ladies and Gentlemen:

I have purchased a unit of manufacture as listed below. Please register this so I may have your usual warranty protection.

Date Purchased_____ Model Number_____

Serial Number (if applicable) _____

Type of Unit Purchased_____

Purchased From_____

Seller's Address_____

Your Name_____

Your Address_____

City_____ST_____Zip Code_____

Phone _____ Fax _____

Mail Directly to:

Armada Systems, Inc.

P.O. Box 307

Mary Esther, FL 32569

OR

Fax: 850-243-4009