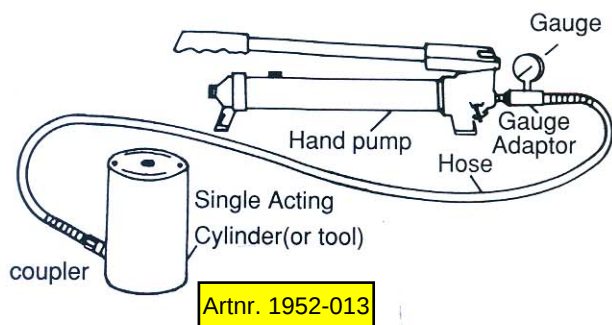


SERVICE MANUAL

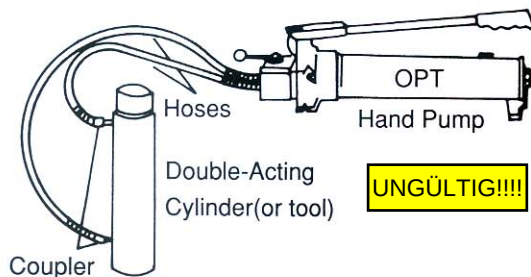
HYDRAULIC PUMP

OPERATIONAL INSTRUCTIONS

Hydraulic Connections - All hydraulic tool must be properly connected to the hydraulic pump to function. The following diagram shows the basic connections of hydraulic tool to pumps.



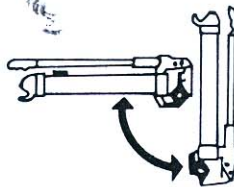
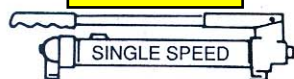
1. Hand pump - Two-way Valve
2. Hose - One required
3. Coupler
4. Single-Acting Cylinder - Hydraulic force in one direction only.



1. Hand pump - Four-way Valve
2. Hose - Two required
3. Coupler
4. Double-Acting Cylinder - Hydraulic force in advance and retract.

How to Operate Hydraulic Hand Pumps with TOOL

Artnr. 5113-016



Ausgleichsventil

1941-011

aber nicht im Satz 0629-189

HOSE
Release valve finger-tight
turning handle near hose
end of pump clockwise.

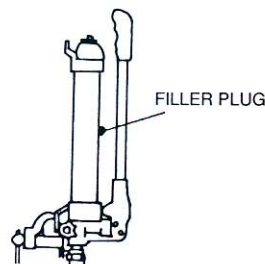
HOLD
Pump in
any position-
horizontal or vertical with
hose end down.

RELEASE
Release valve for lowering
load by turning handle near
hose end of pump
counterclockwise.

MAINTENANCE

To check oil level in pump, open pump release valve to allow oil to return to pump.

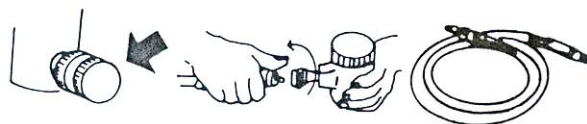
Ölstand checken:
Öffnen Sie das Ausgleichsventil(release) damit das Öl in die Pumpe zurückrinnen kann. Dann stellen Sie die Pumpe auf und überprüfen Sie den Ölstand.
Bei Verunreinigung bitte reinigen und mit Hydraulik Öl befüllen.
To check oil level in pump, open pump release valve to allow oil to return to pump. and dipstick as if hydraulic oil until DO NOT overfill. system is used frequently drain with clean kerosene. Refill with clean OPT hydraulic oil. (OPT OIL : SHELL TELLUS T-15 OR SAE#20)



KEEP OIL LINES CLEAN

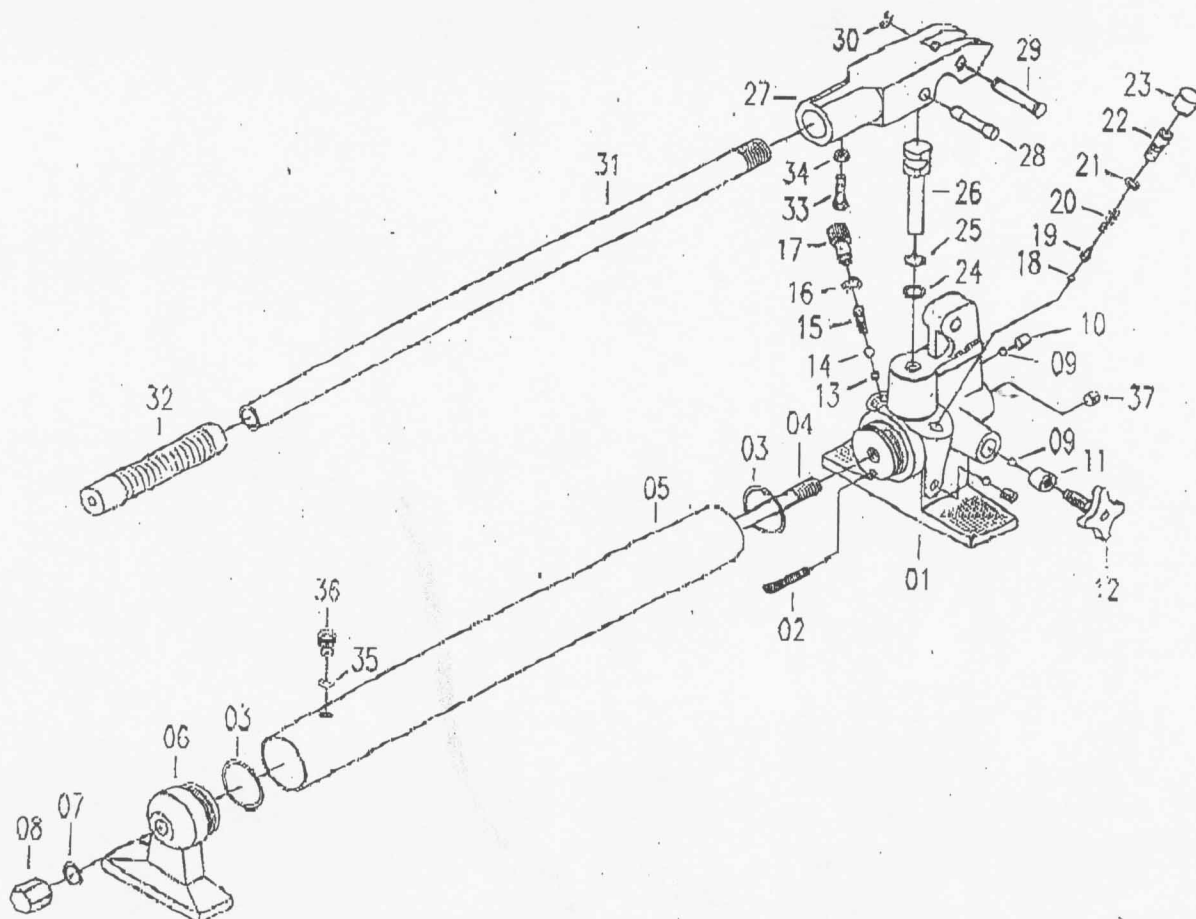
When coupler halves are disconnected, always screw on dust cap. Use every precaution to guard unit against entrance of dirt because dirt and foreign matter may cause pump failure.

Schläuche und Kupplungen sauber halten!!!!



5113-016

H-A HAND PUMP



REF NO.	PARTS NO.	DESCRIPTION	QTY	REF NO.	PARTS NO.	DESCRIPTION	QTY
01	F0001	Pump Housing	1	20	J0003	Spring	1
02	M0001	Oil Filter	1	21	G0009	O-Ring	1
03	G0001	O-Ring	2	22	H0007	Overload Cover Screw	1
04	E0001	Screw	1	23	G0010	Plastic Cap	1
05	D0001	Reservoir	1	24	GA003	O-Ring	1
06	F0002	Tail Base	1	25	G0004	Back-Up Ring	1
07	G0002	O-Ring	1	26	E0003	Piston	1
08	E0002	Nipple	1	27	F0003	Yoke	1
09	K0001	Check Ball	3	28	E0390	Piston Pin	1
10	H0003	Set Screw	2	29	E0005	Yoke Pin	1
11	G0007	O-Ring	1	30	I0001	Retaining Ring	1
12	B0001	Release Valve	1	31	D0002	Handle	1
13	K0002	Check Ball	1	32	G0005	Handle Grip	1
14	K0003	Check Ball	1	33	H0001	Screw	1
15	J0001	Spring	1	34	H0002	Nut	1
16	J0002	Washer	1	35	G0008	O-Ring	1
17	H0006	Valve Cover Screw	1	36	H0005	Air Release Screw	1
18	K0011	Check Ball	1	37	H0054	Screw	1
19	E0006	Spring End Cap	1				