HUCK HK453-C 504 Structural Blind Rivet Instruction Manual

PREL IMINARY
Instruction Manual
Models 504 and 505
Hydraulic Installation Tools

NOTICE
THIS MANUAL IS SPECIFICALLY FOR MODEL 504 HYDRAULIC INSTALLATION TOOL, SERIAL NUMBER 2715 AND UP, AND MODEL 505 HYDRAULIC INSTALLATION TOOL, SERIAL NUMBER 3295 AND UP. IT IS ALSO APPLICABLE TO EARLIER MODELS FOR REPLACEMENT PARTS, MAINTENANCE, TROUBLE- SHOOTING, ETC.
PLEASE READ THIS MANUAL CAREFULLY. IF YOU NEED FURTHER ASSISTANCE, PLEASE CONTACT YOUR HUCK REPRESENTATIVE OR THE NEAREST HUCK OFFICE LISTED ON THE BACK COVER.

Contents

DESCRIPTION

GENERAL

Huck Models 504 and 505 In-line Hydraulic Installation Tools (H.LT.) are designed to install a variety of HUCKBOLT® Fasteners and Huck Blind Fasteners, and to operate on 5400-5700 psi PULL and 2200-2400 psi RETURN pressures as supplied by Huck Hydraulic POWERIG® Models 906, 908, 910, 911, 916 and 917 or equivalent.

Models 504 and 505 must be equipped with a NOSE ASSEMBLY designed for the installation of a specific fastener. Nose Assemblies for use on

Models 504 and 505 are shown in SELECTION CHARTS, Form 461.

Models 504 and 505 are identical in design, and vary only in size and capacity.

Seals and hoses used in the 504 and 505 H.LT. are compatible with phosphate ester base hydraulic fluids.

Table 1 — SPECIFICATIONS

MODEL NO.	FASTENER SIZE	WIDTH	LENGTH	HEIGHT	WEIGHT	HYDRAULIC POWER SOURCE
504	—16″)	3.3 in. 84 mm	7.5 in. 191 mm	9.6 in. 244 mm	17.5 lbs. 7.9 kg	HUCK(3) HYDRAULIC POWER IG PULL PRESSURE 5400-5700 psi 37250-39000 kPa RETURN PRESSURE 2200-2400 psi 15200-16500 kPa
505	—20″) —24	4.2 in. 107 mm	8.3 in. 211 mm	10.5 in. 267 mm	26.2 lbs. 11.9 kg	

1. See SELECTION CHARTS, Form 461 for a complete listing of fasteners and Nose Assemblies for each tool.
2. Widths, lengths, heights and weights do not include Nose Assemblies.
3. Proper PULL and RETURN pressures are important for the proper function of the Installation Tool and Nose Assemblies, and for the safety of the operator. A GAUGE SET-UP, P/N

   x T-~~10206~~, is available for checking these pressures. Instructions are furnished with T- ~~10206~~ and in applicable POWERIG Instruction Manuals.

   * T-10280

CAUTION

HUCK RECOMMENDS THAT ONLY HUCK HYDRAULIC POWERIGS BE USED AS THE POWER SOURCE FOR

HUCK INSTALLATION EQUIPMENT. HYDRAULIC POWER UNITS THAT DELIVER HIGH PRESSURE FOR BOTH “PULL” AND “RETURN” AND ARE NOT EQUIPPED WITH RELIEF VALVES ARE SPECIFICALLY NOT RECOMMENDED AND MAY BE DANGEROUS.

Except for nose assembly, each tool is complete with handle, hoses, couplers and control cord ready to be attached to the POWERIG hoses and control cord.
Figure 1 is a sectional view of the Model 504 or Model 505 Hydraulic Installation Tools showing configuration and arrangement of components.
Each tool is basically a cylinder and piston assembly. An unloading valve, designed to relieve the hydraulic pressure at both ends of the stroke, is positioned by the piston. A pintail ejector is provided to eject the broken pintail from the nose assembly. The end of the piston rod is threaded and a nose adapter and retaining rings are included for attaching nose assemblies.

PRINCIPLE OF OPERATION

Refer to Figure 1
When tool hoses and control cord are connected to POWERIG hoses and control cord, PULL and RETURN strokes of tool are controlled by a trigger in the handle. When the trigger is depressed, a solenoid operated valve in the POWERIG directs pressured hydraulic fluid through the PULL hose to the front side of piston, and allows fluid on the RETURN side to flow back to tank. The piston and nose assembly collet moves rearward causing follower O-rings and/or spring to impart a forward motion to the follower. If tool and nose assembly is in position on a fastener pin and collar, this forward motion causes the jaws to clamp onto pintail of fastener and installation cycle commences. Clamping pressure is applied to the sheets. The anvil is forced forward, swaging the collar into locking grooves of the fastener. When the anvil hits the sheet, continued pull causes the pintail to break off. When the piston reaches the end of its PULL stroke, it uncovers flats on the rear end of the unloading valve. These flats were designed to provide a passage for hydraulic fluid from PULL side to RETURN side of piston, “unloading” or *“dumping” the pressurized fluid back to tank. When the trigger is released, the solenoid is de-energized and the valve directs pressurized fluid to rear side of the piston and allows fluid on PULL side to flow back to tank. This causes piston and collet to move forward and pushes nose assembly and tool off the swaged (installed) fastener. Nose assembly jaw release contacts jaws, causing them to open and release the broken-off pintail. The ejector rod hydraulically ejects the pintail out the front of the nose assembly. When the piston reaches the end of its RETURN stroke, pressure is built up causing the POWERIG idler valve (except on Models 910 and 911) to go to idling pressure. Idling pressure keeps the tool piston and nose assembly collet, jaws, etc. in the forward position ready for the next installation cycle.
A flat on the front end of the unloading valve was designed to provide a passage for hydraulic fluid from RETURN side of piston to PULL side of piston and back to tank.

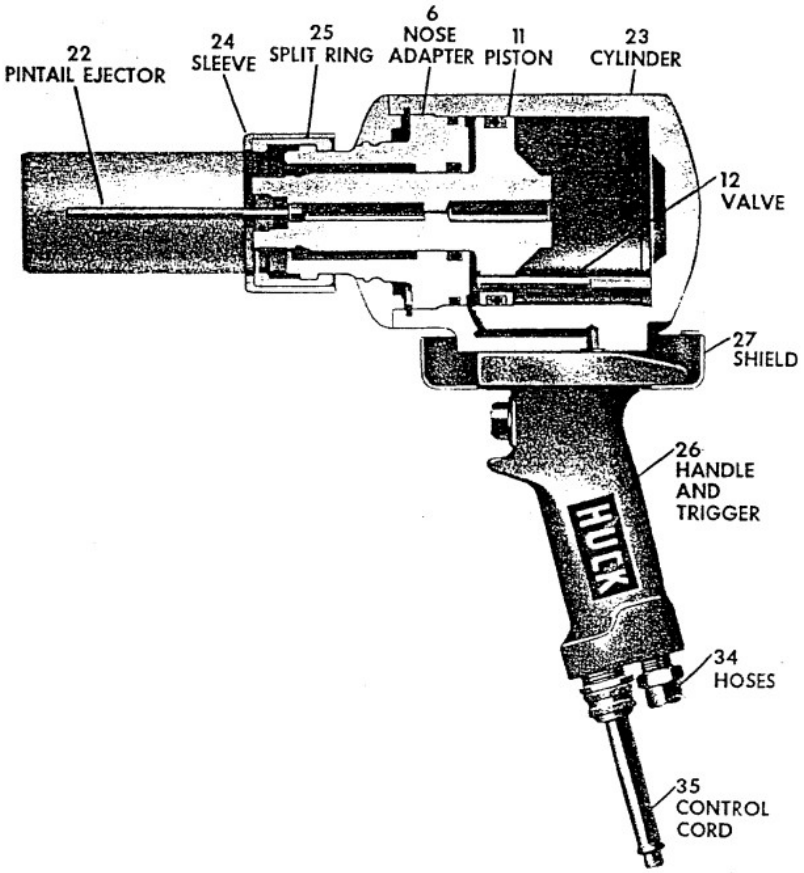


Figure 1 — SECTIONAL VIEW

PREPARATION FOR USE

CAUTION

KEEP DIRT AND OTHER FOREIGN MATTER OUT OF THE HYDRAULIC SYSTEMS OF THE TOOLS, HOSES, COUPLERS AND POWERIG. DO NOT LET HOSE FITTINGS AND COUPLERS CONTACT A DIRTY FLOOR OR UN- CLEAN WORKING URFACE. FOREIGN MATTER IN HYDRAULIC FLUID WILL CAUSE THE TOOL AND POWERIG VALVES TO MALFUNCTION.

POWER SOURCE CONNECTIONS

Coat hose fitting threads with a non-hardening TeflonT-M. thread compound such as Slic-tite.T-M- (Slic-tite is manufactured by the Markal Co., and is available from Huck in stick form as part number 503237.) DO NOT use Teflon tape on hose fitting threads.

1. Screw PULL pressure hose, with coupler nipple, into handle port “P.”” Screw RETURN pressure hose, with coupler body, into handle port “R.”
2. Use a Huck POWERIG or equivalent that has been prepared for operation per applicable instruction manual. Check both PULL and RETURN pressures and adjust as necessary to match installation tool per Table 1. Gage Set-up, part number T-10206, for checking POWERIG pressures is available from Huck.
3. Turn POWERIG to “OFF” and couple tool hoses to POWERIG hoses. Be sure that the hoses run from tool part “P” to POWERIG port “‘P” and from tool port “R” to POWERIG port “R”.
4. Connect trigger cord to POWERIG cord. Turn POWERIG to “ON” and depress and release trigger a few times lo circulale hydraulic fluid. Observe action of tool. Check for fluid leaks.
5. Attach the proper Nose Assembly to the Lool per instructions on the Nose Assembly Data Sheet.

OPERATING INSTRUCTIONS

CAUTION

REASONABLE CARE OF INSTALLATION TOOLS BY OPERATORS IS AN IMPOR- TANT FACTOR IN MAINTAINING TOOL EFFICIENCY AND ‘IN REDUCING RE- PAIR DOWN-TIME. DO NOT ABUSE THE TOOL BY DROPPING IT, USING IT AS A HAMMER OR OTHERWISE CAUSING UNNECESSARY WEAR AND TEAR. BE SURE THERE IS ADEQUATE CLEAR- ANCE FOR THE TOOL AND OPERA- TOR’S HANDS BEFORE PROCEEDING.
DO NOT CONNECT TOOL HOSES TO EACH OTHER AND USE AS A HANDLE FOR CARRYING.
To install a HUCKBOLT Fastener:

1. Check work and remove excessive gap. (Gap is the space between sheets. Gap is excessive if not enough pintail sticks through the collar for the nose assembly jaws to grab onto).
2. Put HUCKBOLT pin in hole.
3. Slide HUCKBOLT collar over pin. (The beveled end of the collar must be towards the nose assembly and tool.)
4. Push nose assembly onto the pin until the nose assembly anvil stops against the collar. Tool and nose assembly must be held at right angles (90°) to the work.
5. Depress tool trigger 1o start installation cycle.
6. When forward motion of nose assembly anvil stops and pintail breaks off, release trigger. Tool will go into its return stroke, push off the installed fastener and eject the pintail.
7. The tool and nose assembly is ready for the next installation cycle.

CAUTION
DO NOT PULL ON A PIN WITHOUT A COLLAR. IF A PIN IS PULLED WITHOUT A COLLAR, THE PIN WILL EJECT FORCIBLY WHEN THE PINTAIL BREAKS OFF.

MAINTENANCE AND REPAIR

PREVENTIVE MAINTENANCE
NOTE
For supplementary information refer to Trouble- shooting Chart, Parts Lists, and Disassembly and Assembly procedures in this Section.
System Inspection
Operating efficiency of the installation tool is directly related to performance of the complete system, including the tool with nose assembly, hydraulic hoses, trigger and control cord, and POWERIG. Therefore, an effective preventive maintenance program includes scheduled inspections of the system to detect and correct minor troubles.

1. Inspect tool and nose for external damage.
2. Verify that hydraulic hose fittings and couplings and electrical connections are secure.
3. Inspect hydraulic hose for signs of damage or aging. Replace hose at six-month to one-year intervals, depending on use.
4. Inspect tool, hose, and POWERIG during operation to detect abnormal heating, leaks, or vibration.

POWERIG Maintenance
Maintenance instructions and repair procedures are in the applicable POWERIG Instruction Manual,
Tool Maintenance
At regular intervals, depending on use, replace all O-rings and back-up rings in the tool. Spare Parts Kits should be kept on hand. (See Table 4 and SPARE PARTS AND SPARE PARTS KITS).
Inspect cylinder bore, piston and piston rod and unloading valve for scored surfaces, excessive wear or damage, and replace as necessary.
Nose Assembly Maintenance
Daily cleaning of the nose assembly is recom- mended. This can usually be accomplished by dipping nose assembly in mineral spirits, or other suitable solvent, to clean jaws and wash away metal chips and dirt. If more

thorough cleaning or maintenance is necessary, disassemble the nose assembly. Use a sharp pointed “pick” to remove imbedded particles from the pull grooves of the jaws. Reassemble per instructions on the applica- ble Nose Assembly Data Sheet.

TROUBLESHOOTING

Always check out the simplest possible cause of a malfunction first. For example, a switch turned off or a power cord not connected. Then proceed

Table 2. Troubleshooting Chart

TROUBLE	PROBABLE CAUSE	CORRECTIVE ACTION
A. Tool fails to operate	Inoperative POWERIG. Loose or disconnected control c ord. Defective trigger assembly. Loose or faulty hydraulic hose c ouplings.	Check power source to POWERIG. Troublesh oot POWERIG. Check and tighten securely. Replace trigger assembly. Check and tighten securely or replace faulty c ouplings.
B. Tool operates in reverse; stops in back position	Reversed hydraulic hose connec tions between POWERIG and T ool.	Check and correct hose connections.
C. Tool leaks hydraulic oil	Depending on where leak occurs, defective or worn O-ring s, loose hydraulic hose connecti on at Tool or handle screws.	Check and replace O-rings and back-uprings, or tighten threaded connectors of hydraulic ho se and handie screws.
D. Hydraulic oil overheats	POWERIG not operating properl y. Hydraulic couplers not completel y tightened.	Troubleshoot POWERIG. Tighten hydraulic couplers.
E. Tool operates erratically a nd fails to install fastener pr operly	Low or erratic hydraulic pressure supply. Defective or excessively worn pi ston O-ring in Tool. Excessive wear or scoring of slid ing surfaces of Tool parts. Solenoid pin too short — worn or peened over.	Troubleshoot POWERIG. Replace O-ring and back-up ring. Check and replace defective part. Replace solenoid pin.
F.Pull grooves on fastener pi ntail stripped during pull stro ke	Operator not sliding nose compl etely onto fastener pin- tail, Incorrect fastener length. Worn or damaged jaw segments . Metal chips accumulated in pull grooves of jaw segments. Excessive sheet gap.	Instruct operator in proper installation method s. Use correct length fastener. Check and replace jaw set. Clean jaw segments. Eliminate excessive gap.
G. Collar of HUCKBOLT Fas tener not completely swaged	Improper Tool operation. Scored anvil in nose.	See Trouble E. Check and replace anvil.
H.Tool “hangs-up” on swage d collar of HUCK- BOLT Fastener	Improper Tool operation.	See Trouble E.
I. Pintail of fastener fails to b reak	Improper Tool operation. Pull grooves on fastener strippe d.	See Trouble E. See Trouble F.
J. Jaw segments do not mai n- tain proper position in coll et	Improper operation of jaw follow er.	Check spring and install correct number of foll ower O-rings. Clean before reassembling.

DISASSEMBLY AND ASSEMBLY

GENERAL

During disassembly and assembly, take the following precautions to avoid damaging tool or components:

(a) Always work on a clean surface.

(b) Use relatively soft materials, such as brass, aluminum or wood, to prolect tool when applying pressure.

(c) Apply a conlinuous strong pressure, rather than sharp blows, to disassemble or assemble a component. An arbor press provides steady pressure to press a component in or out.

(d) Never conlinue to force a component if it “hangs-up™ due to misalignment. Reverse the procedure to correct misalignment and start over.

(e) Smear Lubriplate 130AA,T-M- or equivalent, on O-rings and mating surfaces to aid assem- bly and prevent damage to O-rings. (Lubri- plate is manufactured by Fiske Brothers Refining Co. and is available in most localities. A handy tube of Lubriplate 130AA is available from Huck as part number 502723).

(f) Coat hose fitting threads with a non- hardening Teflon™ M- thread compound such as Slic-tite.T-M- (Slic-tite is manufactured by the Markal Co., and is available from Huck in stick form as part number 503237.) DO NOT use Teflon tape on hose fitting threads.

DISASSEMBLY AND ASSEMBLY TOOLS

A special Spanner Wrench, part number 103556, is available from Huck to aid in the disassembly and assembly of pintail ejector gland (16).

Standard hand tools such as wrenches, drifts, copper or lead hammers, screwdrivers, socket screw hexagon keys, long forceps (tweezers), etc.

which can be purchased at most local supply firms are required. If possible, an arbor press and vise with soft jaws should be available. Standard tools available from Huck are shown in Table 3.

Table 3 — STANDARD TOOLS AVAILABLE FROM HUCK AND THEIR USE

Part No.	Description	Used on	
		Ref. No.	Part No.
502296	Hex Key, 3/16 across flats	31	501278
502293	Hex Key, 3/32 across flats	28	501625
502859	Truarc Pliers, Waldes Kohinoor, In c. #0500	5	500996
502860	Truarc Pliers, Waldes Kohinoor, In c. #S-6700	5	502112
502443	Hex Key, 1/16 across flats	29	103944

DISASSEMBLY

For component identification, refer to Figure 1, Sectional View; Figure 2, Exploded View and Table 4, Parts Lists, Numbers in parentheses ( ) are reference numbers shown in Figures 1 and 2.

The following procedure is for a complete disassembly. Disassemble only the components necessary to check and replace a damaged O-ring, back-up ring or other component.

NOTE

Be sure POWERIG is turned OFF before removing tool or nose assembly for cleaning or for replacing worn or damaged components.

1. Uncouple tool hoses and disconnect control cord.
2. Remove retaining ring (1), sleeve (2) and split-ring (3), or sleeve (24) and split-ring (25) and remove nose assembly.
3. Unscrew four socket head cap screws (31) and separate handle assembly from cylinder assembly. Drain hydraulic fluid.

   NOTE

   If handle assembly is not removed, unscrew hydraulic couplers and drain hydraulic fluid.
4. Remove shroud (4).

5. Remove retaining ring (5).
6. Pull adapter assembly (6 thru 10) from cylinder (23).
7. Pull piston assembly (11 thru 22) from cylinder (23).
8. Remove unloading valve (12).
9. Remove ejector gland group (15 thru 21) and pintail ejector (22). Use Special Spanner Wrench, P/N 103556, to unscrew gland.

   NOTE

   The ejector gland can be removed to inspect and/or replace components without completely disassembling the tool.
10. Use a small dull-pointed rod to remove O-rings and back-up rings from all components.
11. To remove trigger (29), unscrew nut on cord grip (37) and slide strain-relief grommet (38) down on cord. Remove socket set screw (30), and pull trigger out of handle (26). Loosen two set screws at rear of trigger to remove from control cord. Remove two #6-32 socket set screws to disassemble the switch for cleaning.
12. Loosen two screws in electrical connector cap (plug) (36) to disassemble for replacing or wiring,

ASSEMBLY

For component identification, refer to Figure 1, Sectional View; Figure 2, Exploded View and Table 4, Parts List. Numbers in parentheses ( ) are reference numbers in Figures 1 and 2.

Before assembling tool:

a. Clean components in mineral spirits or other solvent compatible with O-ring seals.

b. Clean out O-ring grooves.

c. Inspect components for scoring, excessive wear or damage,

d. Replace O-rings and back-up rings. Be sure that relative positions of the O-rings and back-up rings are as shown in Figures 1 and 2. Specifications for O-rings, back-up rings and other standard components are shown in Table 5 so that they may be purchased locally.

e. Smear Lubriplate 130AA on O-rings and mating surfaces to prevent damage to O-rings and to aid assembly.

1. Assemble ejector gland group and pintail ejector to the piston as follows:

   a. Insert pintail ejector (22) in piston (11).

   b. Drop in washer (21).

   c. Drop in O-ring (18).

   d. Screw in gland (16) with O-ring (15) in groove in threads, O-ring (20) and back-up rings (19) in LD. and back-up ring (17) on O.D.

   Tighten gland (16) with Spanner Wrench, part number 103556.
2. Push piston with O-ring (14) and back-up rings (13) into cylinder (23).
3. Push unloading valve (12) into hole through piston (11). BE SURE UNLOADING VALVE IS ASSEMBLED WITH FOUR FLATS TO THE REAR AS SHOWN.
4. Push adapter (6) with O-ring (10) and back-up ring (9) in LD. and O-ring (8) and back-up ring (7) on 0.D. over piston rod and into cylinder (23).
5. Assemble retaining ring (5) into groove in cylinder (23).
6. Push shroud (4) into place over the adapter.
7. Assemble control cord (35) with plug (36) and trigger (29) as follows:

   a. Unscrew nut on cord grip (37) and slide strain-relief grommet (38) down on cord.

   b. Feed end of cord (35) into handle and pull ends of each conductor out of the trigger pocket.

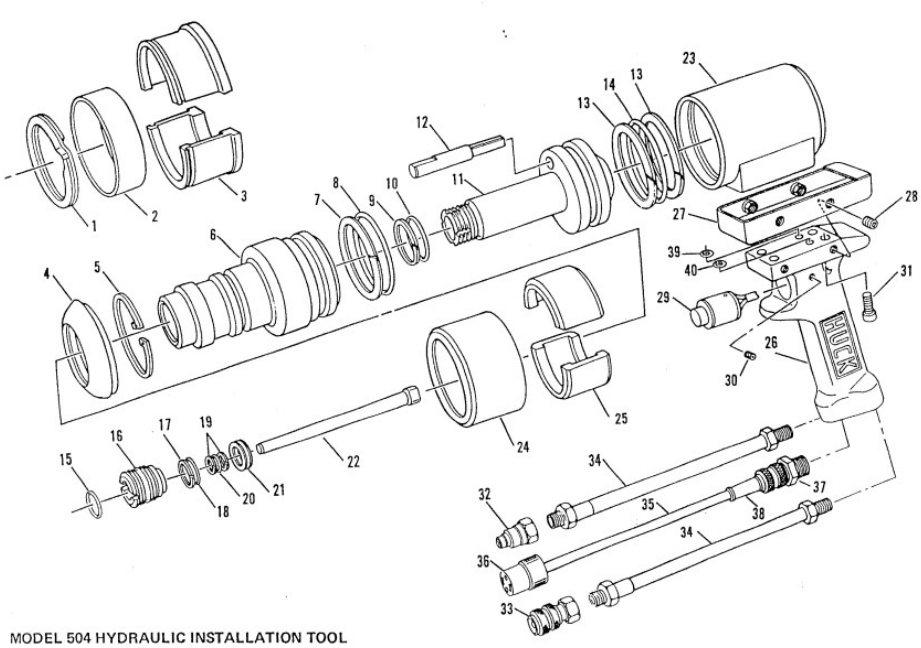
   c. Attach cord to trigger (29).

   d. Push trigger into handle and tighten set screw (30).

e. Slide strain-relief grommet (38) into cord grip (37) and tighten nut.

f. Assemble cap (36) to other end of control cord (35).

8. Screw hose (34) with coupler nipple (32) into handle (26) port marked “P”. Screw hose (34) with coupler body (33) into handle (26) port marked “R™.
9. Place O-rings (39) and (40) in pockets of cylinder (23) and attach handle assembly using four socket head cap screws (31). Tighten screws to 135 inch pounds torque if screws are plated, and 180 inch pounds if unplated. THESE SCREWS MUST BE KEPT TIGHT.
10. Slide shield (27) over hose, cord and handle and hold in place by tightening four socket set screws (28).
11. Connect tool hoses to POWERIG hoses and cycle tool a few times. Observe action of tool and check for leaks.
12. Attach nose assembly to tool following applicable Nose Assembly Data Sheet. Use Split Ring Group called for on the data sheet to hold the hose assembly to the tool.



MODEL 504 HYDRAULIC INSTALLATION TOOL
SER. NO. 2715 & UP
MODEL 505 HYDRAULIC INSTALLATION TOOL
SER. NO. 3295 & UP

Figure 2 – EXPLODED VIEW

Table 4 — PARTS LIST

REF. NO.	PART NAME	R NO.EQ .	504	505
—	Split Ring Group	1	104729	—-
1″	Ring — Retaining	1	501514	—-
2	Sleeve — Retaining	1	102148	—-
3	Split Ring	1	102147	—-
4	Shroud	1	100454	100246
5*	Ring-Retaining	1	500996	502112
—	Adapter Assembly	1	110020	109797
6	Adapter	1	—-	—-
7*	Back-up Ring (Outside)	1	501155	501162
8*	0-ring (Outside)	1	504491	504498
9*	Back-up Ring (Inside)	1	501143	501147
10*	0-ring (Inside)	1	504622	504626
—	Piston Assembly Group	1	106625	106630
—	Piston-Valve-Ring Group	1	106629	106631
11	Piston	1	—-	—-
12	Valve-Unloading	1	110258	110259
13*	Back-up Ring	2	502855	503752
14*	0-ring	1	504524	504531
—	Ejector Gland Group	1	104638	104638
	0-ring (Outside)	1	504408	504408
16	Gland	1	100238	100238
17*	Back-up Ring (Outside)	1	501085	501085
18*	0-ring (Outside)	1	504409	504409
19*	Back-up Ring (Inside)	2	601080	501080
20*	0-ring (Inside)	1	504547	504547
21	Washer	1	100236	100236
22	Ejector-Pintail	1	100451	100235

REF. NO.	PART NAME	R NO.EQ.	504	505
23	Cylinder	1	100446	100231
—	Split Ring Group	1	104643	104644
24	Sleeve-Retaining	1	100456	100243
25	Split Ring	1	100455	100247
—	Handle Assembly Group	1	110951	110951
—	Handle Assembly	1	110949	110949
—	Handle & Shield	1	110420	110420
26	Handle	1	—-	—-
27	Shield Group	1	110277	110277
28	Screw-Set	4	501625	501625
29	Trigger	1	103944	103944
30	Screw-Set	1	501625	501625
31	Screw-Cap	4	501278	501278
—	Hose & Coupler Group	1	110941	110941
—	Coupler Set	1	110440	110440
32	Nipple (Male)	1	—-	—-
33	Body (Female)	1	—-	—-
	0-ring	1	504438	504438
– –	Back-up Ring	1	501102	501102
34	Hose-Hydraulic	2	123377	110939
35	Control Cord Assembly	1	110940	110940
36	Cap (2 Prong Plug)	1	110696	110686
37	Cord Grip	1	505344-2	505344-2
38	Gromment (Stain Relif)	1	104619	104610
		1	104610	104619
39′	0-ring	1	504407	504407
40″	0-ring	1	504409	504409

NOTES

1. All part numbers shown Huck for replacements.
2. See Table 5 for specifications for 500000 part numbers,
3. Asterisks (*) indicate parts in Spare Parts Kits 106639 (504) and 106640 (505).
4. Indentions indicate the components or (sub) assemblies are included in the assembly immediately above it.

Table 5 — SPECIFICATIONS FOR 500000 PART NUMBERS

PART NUMBER	PART NAME	SPECIFICATIONS
500996	Ring-Retaining	Truarc N5000-256
501080	Back-up Ring	5-1124808 (4)
501085	Back-up Ring	51124813 (4)
501102	Back-up Ring	S-11248-111
501143	Back-up Ring	S-11248-216 (4)
501147	Back-up Ring	S-11248-220 (4)
501155	Back-up Ring	S-11248-228 (4)
501162	Back-up Ring	S-11248-235 (4)
501278	Screw	Socket Head Cap, 1/4-28 x 3/4 long, LOC-W EL
501514	Ring-Retaining	Spirolox RST-200
501625	Screw	Cup Point Set, #10-24 x 1/4 long, LOCWEL
502112	Ring-Retaining	Truarc N5000-347
502855	Back-up Ring	S-11248-330 (4)
503752	Back-up Ring	S-11248-337 (4)
504407	O-ring	AS 568011 (2) (3)
504408	O-ring	AS 568012 (2) (3}
504408	O-ring	AS 568013 (2) (3)
504438	O-ring	AS 568-111 (2) (3)
504491	O-ring	AS 568228 (2) (3)
504498	O-ring	AS 568235 (2) (3)
504524	O-ring	AS 568:330 (2) (3)
504531	O-ring	AS 568-337 (2) (3)
604547	O-ring	AS 568-008 (2) (5)
504622	O-ring	AS 568-216 (2) (5)
504626	O-ring	AS 568-220 (2) (5)

NOTES

1. Part numbers in the 500000 series are standard parts which generally can be purchased locally.
2. O-ring sizes are specified as AS 568 dash numbers. (AS 568 is an AEROSPACE SIZE STANDARD FOR O-RINGS and formerly was known as ARP.)
3. Material for O-rings marked (3) is VITON (Parker Seal Co. compound V747-75 or equivalent) 75 durometer.
4. Back-up rings are W.S. Shamban & Co. series S$-11248, single turn TEFLON (MS-28774) or equivalent. The dash numbers correspond to the O-ring AS 568 dash numbers.
5. Material for O-rings marked (5) is VITON (Parker Seal Co. compound V709-90 or equivalent) 90 durometer.

SPARE PARTS AND SPARE PARTS KITS

The quantity of spare parts that should be kept on hand varies with the application and number of tools in service. However, spare parts kits containing perishable parts such as O-rings, back-up rings, etc., should be kept on hand at all times. Parts included in Spare Parts Kit 106639 (504) and 106640 (505) are indicated by asterisks (*) in PARTS LIST — Table 4.

PLEASE NOTE:

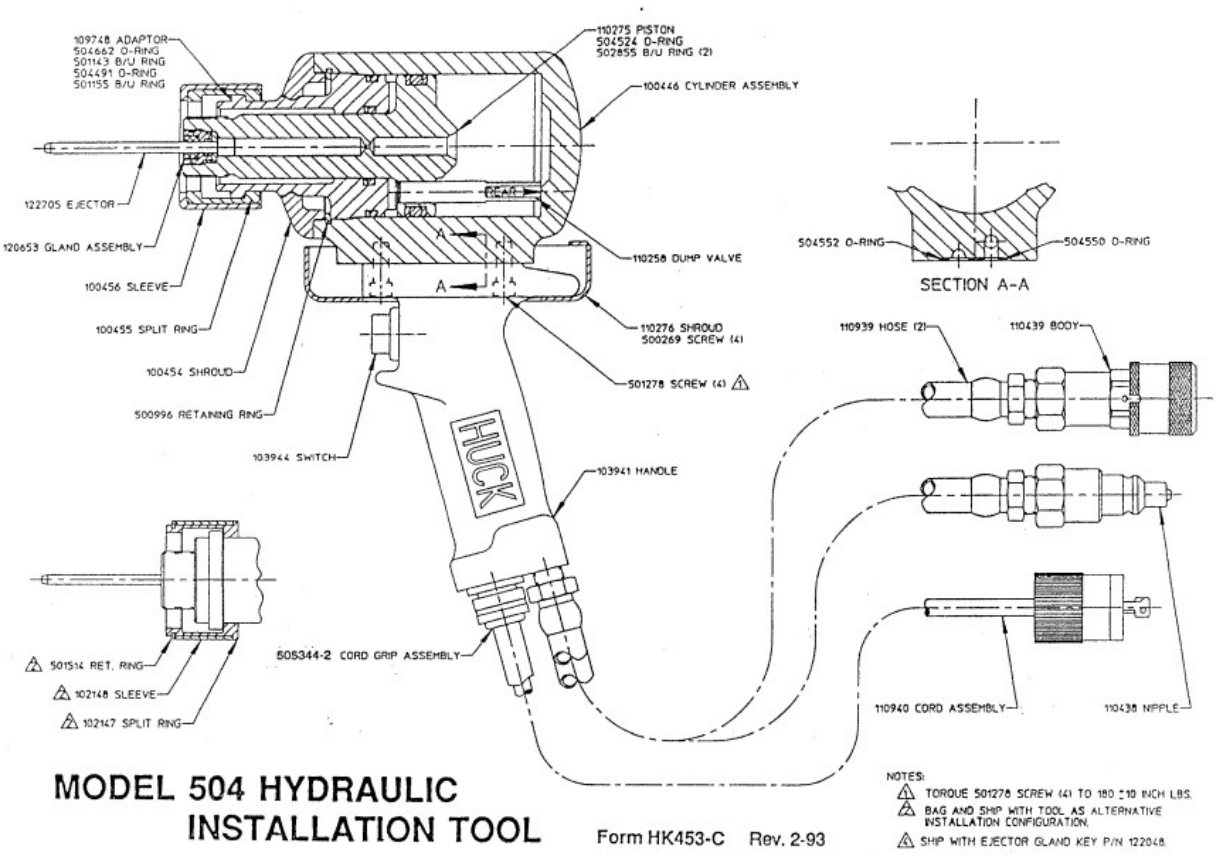
Refer to 504; 505 assembly drawings and Product Update 294, for latest part numbers and changes. Where applicable, refer to new drawings for disassembly/assembly of tool.

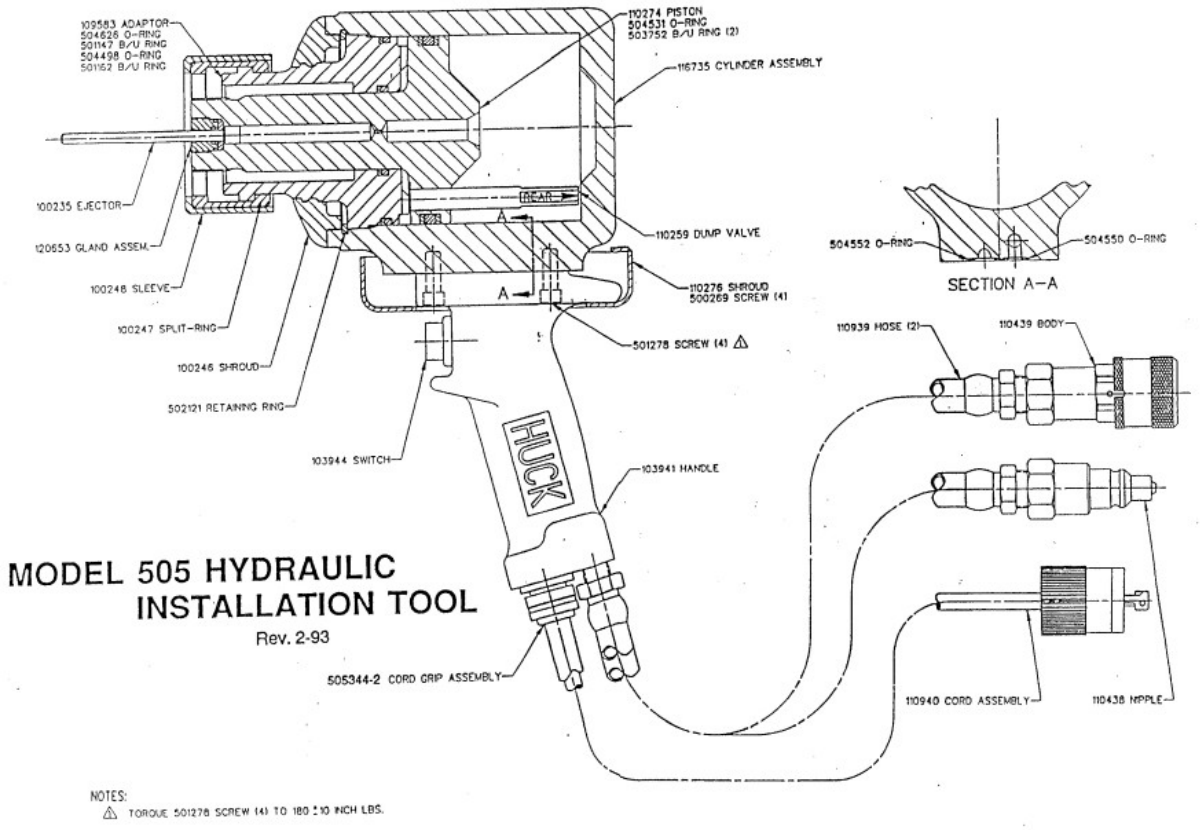
Use hex wrench, 122048, for ejector gland, 120653.

504 and 505 assembly drawings include latest single component part numbers.

To obtain entire sub-assembly when purchasing a main component, please include related parts, for example: Include piston; O-ring; back-up rings (2).

Additional seal information:
504662 (AS 568-325); 504550 (AS 568-011);
504552 (AS 568-013) are National O-ring Co. V25 mat'l.
All 95 durometer.
500779 (AS 568-013) and 501411 (MR-Q4008) are Minn. Rubber Co. (BUNA N) 366Y mat!. Both 70 durometer.





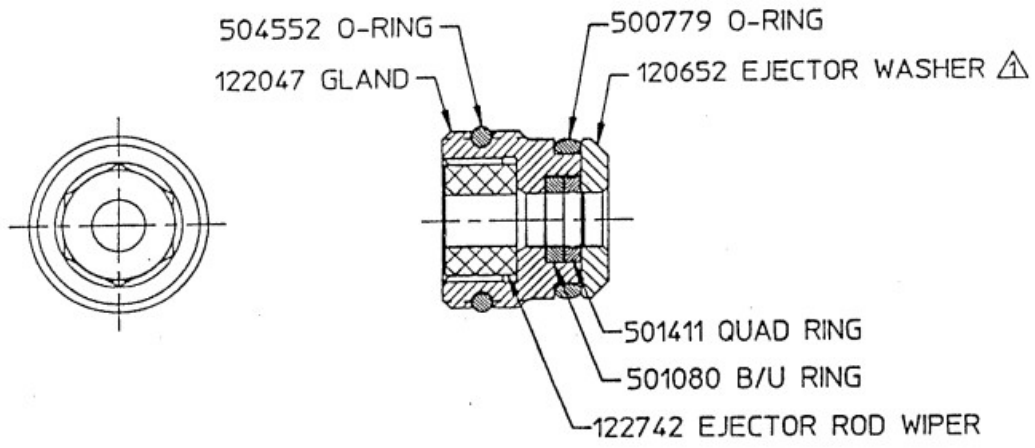
Tool & Product Update

IMPORTANT NOTICE
Effective October 1, 1989
Reference – Hydraulic Installation Tool Models 504,505, 585, UK585-2 and FE5901
The following parts have been obsoleted and superceded to Part Number 120653 Ejector Gland Assembly.
This change has been made to reduce the leakage of hydraulic fluid from the" ejector gland area of the tools.

Part number	**Description**
104638	Ejector Gland Assembly
100238	Gland Ejector
100236	Washer – Ejector
505040	Seal

When customers order any of the above parts they wil receive Part Number 120653. The following service kits and Sub assemblies are also effected, they will now contain the new gland assembly (P/N 120653)

Part Number	**Description**
106639	Service Kit Model 504
106640	Service Kit Model 505
110403	Service Kit Model 585
113735	Service Kit Model FE5901
106625	Piston Assembly – 504
106630	Piston Assembly – 505
111292	Piston Assembly — 585
113351	Piston Assembly – FE5901



NOTES:

⚠1 NOTE ORIENTATION OF LARGE CHAMFER ON DETAIL 120652 (WASHER).

2 SHIP WITH HEX KEY P/N 122048 .

HUCK INTERNATIONAL, INC., I.E.D. 85 GRAND STREET, P.O. BOX 2270 KINGSTON, NEW YORK 12401			
EJECTOR GLAND ASSEMBLY			
DET: T.L.	CK: -	DATE:07-31-91	SCALE: 2/1
FOC. FAC. TFF	A	120653	

DESIGN IMPROVEMENTS

MODEL505 HYDRAULIC INSTALLATION TOOL

Model 505 Hydraulic Installation Tool now incorporates a redesigned Hydraulic Cylinder and Retaining Ring.
A redesigned Retalining Ring Groove has been Incorporated into the – Hydraulle Cylinder. This change will greatly Improve tool life as well as reduce maintenance costs and down time.
The new Hydraulic Cylinder, P/N 116735, will now be sold including a new Retaining Ring, P/N 502121. This is to insure that old style retalning rings will not be used with redesigned cylinders, they are not compatable.
Old retaining rings, P/N 502112, will still be available for use in old style hydraulic cylinders, P/N 100231.
This change will go Into affect during February, 1986.

LIMITED WARRANTIES

Tooling Warranty: Huck warrants that tooling and other items (excluding fasteners, and hereinafter referred as “other items”) manufactured by Huck shall be free from defects in workmanship and materials for a period of ninety (90) days from the date of original purchase.
Warranty on “non standard or custom manufactured products™: With regard to non-standard products or custom manufactured products to customer’s specifications, Huck warrants for a period of ninety (90) days from the date of purchase that such products shall meet Buyer’s specifications, be free of defects in workmanship and materials. Such warranty shall not be effective with respect to non-standard or custom products manufactured using buyer-supplied molds, material, tooling and fixtures that are not in good condition or repair and suitable for their intended purpose.
THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.
HUCK MAKES NO OTHER WARRANTIES AND EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES AS TO MERCHANTABILITY OR AS TO THE FITNESS OF THE TOOLING, OTHER ITEMS, NONSTANDARD OR
CUSTOM MANUFACTURED PRODUCTS FOR ANY PARTICULAR PURPOSE AND HUCK SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF SUCH TOOLING, OTHER ITEMS, NONSTANDARD OR CUSTOM MANUFACTURED PRODUCTS OR BREACH OF WARRANTY OR FOR ANY CLAIM FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.
Huck’s sole liability and Buyer’s exclusive remedy for any breach of warranty shall be limited, at Huck’s option, to replacement or repair, at FOB Huck’s plant, of Huck manufactured tooling, other items, nonstandard or custom products found to be defective in specifications, workmanship and materials not otherwise the direct or indirect cause of Buyer supplied molds, material, tooling or fixtures. Buyer shall give Huck written notice of claims for defects within the ninety (90) day warranty period for tooling, other items, nonstandard or custom products

described above and Huck shall inspect products for which such claim is made. Tooling, Part(s) and Other Items not manufactured byHuck.

HUCK MAKES NO WARRANTY WITH RESPECT TO THE TOOLING, PART(S) OR OTHER ITEMS MANUFACTURED BY THIRD PARTIES. HUCK EXPRESSLY DISCLAIMS ANY WARRANTY EXPRESSED OR IMPLIED, AS TO THE CONDITION, DESIGN, OPERATION, MERCHANTABILITY OR FITNESS FOR USE OF ANY TOOL, PART(S), OR OTHER ITEMS THEREOF NOT MANUFACTURED BY HUCK. HUCK SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF SUCH TOOLING, PART(S) OR OTHER ITEMS OR BREACH OF WARRANTY OR FOR ANY CLAIM FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

The only warranties made with respect to such tool, part(s) or other items thereof are those made by the manufacturer thereof and Huck agrees to cooperate with Buyer in enforcing such warranties when such action is necessary.

Huck shall not be liable for any loss or damage resulting from delays or nonfulfilment of orders owing to strikes, fires, accidents, transportation companies or for any reason or reasons beyond the control of the Huck or its suppliers.

Huck Installation Equipment

Huck International, Inc. reserves the right to make changes in specifications and design and to discontinue models without notice.

Huck Installation Equipment should be serviced by trained service technicians only.

Always give the Serial Number of the equipment when corresponding or ordering service parts.

Complete repair facilities are maintained by Huck

International, inc. Please contact one of the offices listed below.

Eastern

One Corporate Drive Kingston, New York 12401-0250 Telephone (914) 331-7300 FAX (914) 334-7333

Canada

6150 Kennedy Road Unit 10, Mississauga, Ontario, L5T 2J4, Canada.

Telephone (905) 564-4825 FAX (905) 564-1963

Qutside USA and Canada

Contact your nearest Huck International Office, see back cover.

In addition to the above repair facilities, there are Authorized Tool Service Centers (ATSC's) -located throughout the 'United States. These service centers offer repair services, spare parts, Service Parts Kits, Service Tools Kits and Nose Assemblies. Please contact your Huck Representative or the nearest Huck office listed on the back cover for the ATSC in your area.

Huck Acceptance is Worid-wide

Huck Fastener maintains company offices throughout the United States and Canada with subsidiary offices in many other countries. Sales engineers and systems specialists located in your area can help in solving your fastener problems.

Huck Fasteners world-wide locations:

Americas

Huck International, Inc.
World Headquarters
3724 East Columbia
Tueson, AZ 85714
800-234-4825
602-747-9898
FAX: 602-748-2142

Huck International, Inc.
Aerospace Fastener Division
3724 East Columbia
Tucson, AZ 85714
800-234-4825
602-747-9898
FAX: 602-748-2142

Huck International, Inc.
Aerospace Fastener Division
PO Box 5268
900 Watsoncenter Rd.
Carson, CA 90749
800-421-1459
310-830-8200
FAX: 310-830-1436

Huck International, Inc.
Industrial Fastener Division
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8001 Imperial Drive
Waco, TX 76714-8117
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FAX: 817-751-5259

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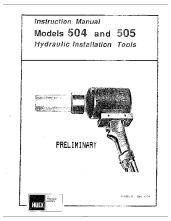
Documents / Resources

	HUCK HK453-C 504 Structural Blind Rivet [pdf] Instruction Manual HK453-C Structural Blind Rivet, HK453-C, Structural Blind Rivet, Blind Rivet, Rivet

References

- Manual-Hub.com - Free PDF manuals!
- User Manual