

# CONTINENTAL NH3 PRODUCTS

## INSTALLATION, OPERATION, REPAIR AND MAINTINANCE INSTRUCTIONS

### PRODUCT SERIES: R-9590

**ATTENTION:** Please follow all of the instruction in this manual carefully and read the entire manual completely, failure to do so may cause the product to function improperly or fail causing serious injury or death.



**ANHYDROUS AMMONIA IS AN INHALATION HAZARD AND WILL CAUSE SERIES INJURY OR DEATH. PLEASE USE EXTREME CAUTION WHEN HANDLING IT OR PERFORMING ANY MAINTENANCE ON EQUIPMENT USED FOR ANHYDROUS AMMONIA.**

**ATTENTION:** Before performing any installation, operation, repair or maintenance please follow the instructions below.

1. You must be certified to work with anhydrous ammonia. If you are not please seek out the appropriate agricultural department to attend a class to obtain the proper certification.
2. Wear appropriate safety goggles, gloves and breathing apparatuses.
3. Drain all tanks, hoses and piping of anhydrous ammonia COMPLETELY before removing, installing, performing maintenance or repairing any equipment.
4. Always remove device from service before performing any maintenance or repair
5. have sufficient water near by
6. Obey all local, state and federal laws regarding the handling of anhydrous ammonia

### **INSTALLATION & OPERATION**

1. The R-9590 is a hydraulic actuated ball valve and should be installed in a 1" or 1-1/4" pipe assembly.
2. To prevent leaking put thread sealant on all pipe threads.
3. When installing ball valve pay close attention to flow direction. Mounting it backwards will cause it leak. Also make sure you can see the indicator flag from the cab.
4. The R-9590 is a volume based shut off not pressure based. To function properly turn the volume control on the hydraulic system on the tractor up to the higher levels.
5. Use 1/4" hydraulic fittings and hose. Attach hydraulic hoses to 657-2 fittings and make sure to use a wrench to hold the 657-2 in place while tightening. Failure to do so will cause the adaptor to turn in the casting causing the casting to crack.

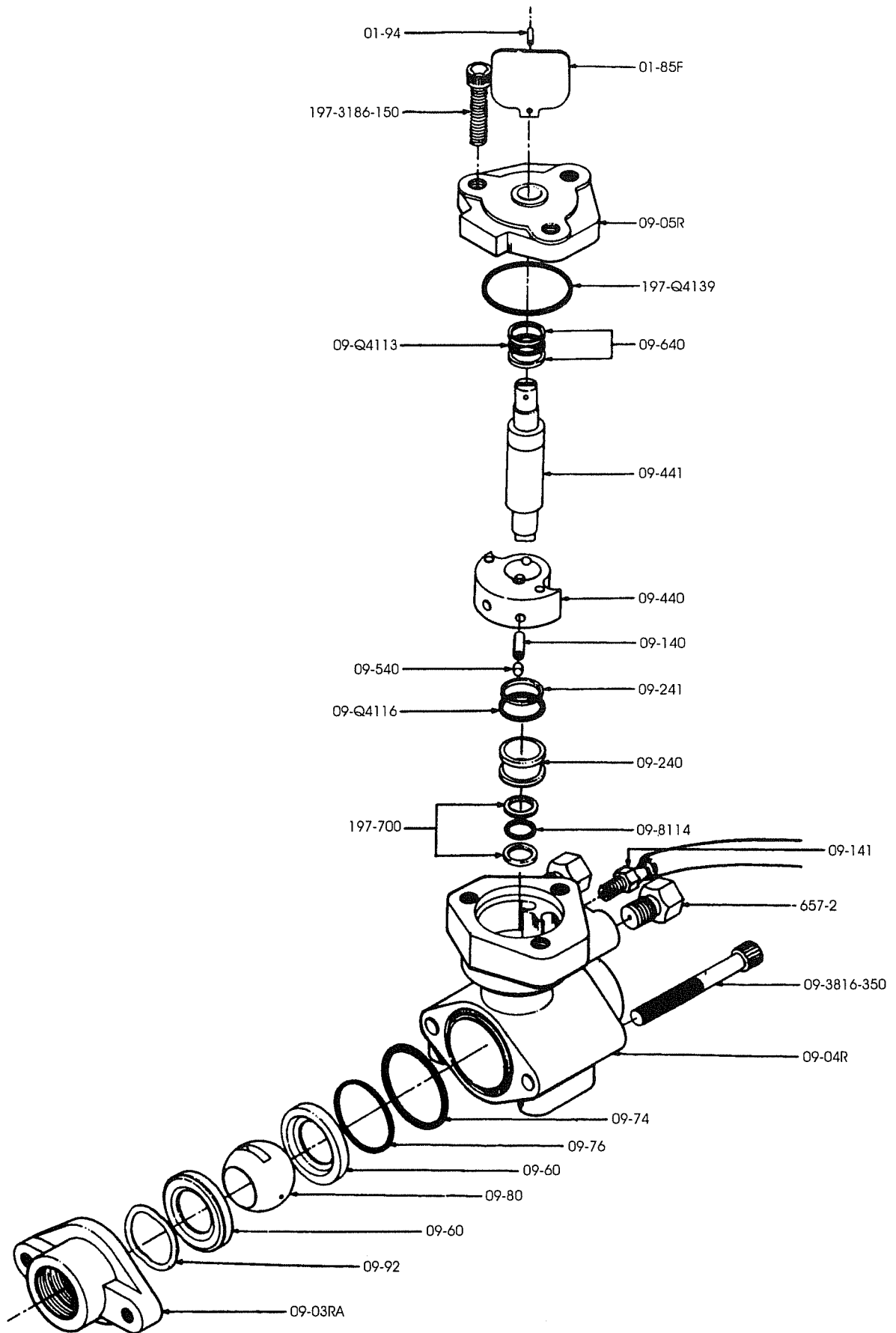
### **MAINTENANCE**

1. Check valve regularly for leaks and wear.
2. Keep valve clean and free from debris
3. If leaking hydraulic fluid from stem body casting or 09-141 hose barb install a repair kit, R-9590-RK, or replace valve immediately.
4. If leaking anhydrous ammonia from inlet or outlet threads try tightening with a wrench. Be careful not to over tighten. If this fails replace valve immediately.
5. If anhydrous ammonia leaks from 09-141 install repair kit, R-9590-RK immediately.

### **REPAIR**

1. Remove unit from service by following the above ATTENTIONS AND CAUTIONS.
2. Remove indicator flag lock pen 01-94-F and remove indicator flag 01-85-F.
3. Remove 3 Allen screws 09-3816-150 and take off the bonnet 09-05-R and replace the Quad-ring 197-Q4139, and 09-Q4113 located on the bonnet.
4. Remove rotor and rotor shaft 09-440 and 09-441 and back up seal washer 09-740 and the rest of the packing from main body 90-04-R and discard the rubber cap seals.
5. Reinstall packing in this order from bottom to top. When inserting the cap seals use grease to eliminate cutting the o-ring. 1=197-700 washer, 09-8114 cap seal, 1=197-700 washer, 09-240 shaft seal gland, 09-Q4116 Quad-ring, 09-740 back up seal washer.
6. Put some hydraulic fluid into the cavity of the 09-04-R and reinstall rotor and rotor shaft 09-441 and 09-440 back into main body 09-04-R and reinstall bonnet 09-05-R and Allen screws 09-3816-150 and tighten firmly with appropriate Allen wrench.
7. Remove Allen screws 09-3816-350 and remove inlet flange 09-03-RB, Remove ball 09-80 and all ball packing from body 09-04-R and discard o-rings and Teflon packing.
8. Reinstall new packing into body in this order from back to front. 09-76 o-ring, 1=09-60F, ball 09-80, 1=09-60F. Replace flange seal o-ring 09-74 and reinstall inlet flange 09-03-RB with Allen screws 09-1816-350 and tighten firmly.
9. Reinstall back into service following the above installation instructions.

**QUESTIONS CALL 800-537-5642**



**CONTINENTAL NH 3 PRODUCTS CO., INC.**

**130 YORKTOWN**

**P.O. BOX 225323**

**DALLAS, TEXAS 75222-5323**

**800-537-5642**

Catalog Number	Description	List Price	100 Piece Ship Wgt.
<b>R-9590 IN-LINE HYDRAULIC BALL VALVE REPAIR PARTS</b>			
01-85-F	INDICATOR FLAG		
01-94-F	FLAG LOCK PIN		
09-03-RA	INLET FLANGE 1"		
09-03-RB	OUTLET FLANGE 1-1/4" MOUNTING HOLES NOT TAPPED		
09-03-RC	INLET FLANGE 1-1/4" MOUNTING HOLES TAPPED		
09-04-R	ROTOR SHUT-OFF BODY		
09-05-R	ROTOR SHUT-OFF BONNET		
09-05-R-1	ON/OFF DECAL		
09-140	ROTOR SHAFT PIN		
09-141	DRAIN HOSE CONNECTOR		
09-240	SHAFT SEAL GLAND		
09-241	SEAL BACK UP WASHER (9/16" ID) (2)		
09-3816-275	SHUT-OFF BODY CAP SCREW		
09-440	ROTOR		
09-441	SHUT-OFF PINION		
09-540	WEAR PAD (FOR ROTOR PIN)		
09-60-F	BALL VALVE SEAT		
09-640	SEAL BACK UP WASHER 9/16" ID		
09-74	BODY "O" RING		
09-76	"O" RING SEAL: SHUT OFF BODY		
09-80	SHUT OFF BALL		
09-8114	CAP SEAL		
09-91	SLAVE VALVE SPRING		
09-Q4113	UPPER SHAFT SEAL		
09-Q4116	LOWER SHAFT SEAL		
197-3816-150	BONNET SCREW		
197-Q4139	BONNET QUAD RING		
657-2	CYLINDER ORIFICE ADAPTOR		
R-9590-RK	REPAIR KIT (ACTUATOR ONLY) INCLUDES: 01-94-F, 09-60F, 09-74, 09-76, 09-540, 09-Q4113, 09-Q4116, 09-8114, 197-Q4139.		
R-R-9590	REWORK (LABOR ONLY)		

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