## DEMCO

## **DEMCO COUPLER SHIM KIT**

Coupler Part Reference sheet					
Part Ref#	Part #	Description	Qty	Notes	
1	13427 & 13765	Handle & Stem Assy.	1	REUSED	
2	13690	Coupler Spring	1	REUSED	
3	14461	Coupler Spacer	1	REUSED	
4	16894	Primary Coupler Shim		INCLD in KIT	
5	13766	Coupler Ball Clamp	1	REUSED	
6	13186	.25 Button Head Screw 2 INCLD ir		INCLD in KIT	
7	16895	Secondary Coupler Shim 1 INCLD in		INCLD in KIT	

Shim Identification				
Primary Shim	•	Color – Silver Zinc Solid Face – No Notch Thickest Shim		
Secondary Shim	• • •	Color -Yellow Zinc Notched Face Thinner Shim		

<u>Step 1</u>- Use the Demco supplied service limit gauge to verify that coupler is within service limits of the shim kit.

NOTE- If coupler fails the service limit gauge, the entire coupler weldment must be replaced. Step 2. Remove the .25" button head screw with a 5/32 allen wrench to disassemble the coupler. Dispose of the old screw, do not reuse.

Step 3 - Utilizing the primary shim provided in the shim kit, reassemble the coupler by first inserting the handle and stem assembly through the top of the coupler if it was removed in the prior steps. From the bottom side of the coupler, slide the spring over the coupler stem. NOTE - The spring does not have a specific orientation, it may be installed in any direction. Next install the spacer block over the stem.
NOTE -There are 2 holes in the spacer block.
Be sure to insert the stem into the hole labeled 2.313.
Next set the shim over the ball clamp and align the square holes. While holding the stem and handle assembly down, push the ball clamp and aliow the ball clamp to slide over the square stem.



<u>Step 4</u> - Use the new button head screw with pre-applied Loctite that is supplied with the shim kit to finish the assembly. Insert the screw through the ball clamp and thread it into the stem with a 5/32 allen wrench. Screw must be torqued 90-in lbs. with applicable torque wrench.

Step 5 - Insert a 2-5/16" hitch ball firmly up into the coupler socket to check coupler operation. Ensure that the

coupler fully closes with a ball in the socket. The coupler latch should open as hitch ball is inserted. When ball is firmly in the socket the latch should lower back down. NOTE – The coupler is fully closed when handle is resting on the top of the coupler body. See Fig – A Step 6 – IMPORTANT – If coupler does not close with primary Shim installed, remove primary shim and install Secondary Shim with the second .25 Button head screw provided with the shim kit. Again, Insert a 2-5/16" hitch ball firmly up into

the coupler socket to check coupler operation. Ensure that the coupler fully closes with a ball in the socket. See Fig A <u>Step 7 -</u> Rotate 2 - 5/16 in coupler socket. Ball Should rotate Freely with little to no resistance

