

Air over Hydraulic Actuating System

CONDITION	CAUSE	CORRECTION
Brakes will not apply.	Brakes not bled of air allowing master cylinder to bottom.	Bleed system and brakes.
	Reservoir located below master cylinder restricting oil flow.	Relocate reservoir above master cylinder to allow gravity feed.
	Feed-line from reservoir restricted or too small.	Insure free flow using 5/16 min. ID line without restriction.
	Master cylinder power piston not retracting to seat, closing off inlet.	Adjust rotochamber push rod attachment.
	Master cylinder power piston struck in cylinder bore.	Free piston by removing obstruction. If cylinder wall or piston OD is excessively damaged, replace with new part.
	Vacuum trapped In reservoir.	Insure vent air passage in reservoir.
	Insufficient oil reserve.	Keep reservoir filled with hydraulic oil.
	Check valve in master cylinder power piston not closing.	Insure free motion of ball in check valve and remove all foreign particles.
	Master cylinder adjuster not working.	Remove floating piston assembly and blow with mouth into small hole on face of piston. If air Passes, replace with new part.
	Packing on master cylinder power piston not sealing.	Replace packing with new Carlisle replacement part.
	Supply line leaking.	Check lines and fittings to insure sealing.
	Air pressure inadequate.	Air pressure at rotochamber should be not less than 80 psi with brakes applied. Correct air system as required to obtain 80 psi min.
Master cylinder leaking at mounting bracket joint.	Packing not sealing.	Replace all master cylinder packing's.
Brake leaking.	Expander tube nozzle packing not sealing.	Replace packing's and inspect connector block nozzle hole for surface damage. If surface does not appear satisfactory for sealing, replace connector with new part.

BRAKE SYSTEM TROUBLESHOOTING



CONDITION	CAUSE	CORRECTION
<p>Automatic adjusters not working.</p>	<ul style="list-style-type: none"> • Adjusting pawl installed backward. • Pawl cannot move freely in its bore. • Worn pawl or actuator teeth. • Pawl spring weak or broken. • Adjusting bolt cannot move freely in actuator. • Detent or clip on shoe retainer are damaged and let adjusting bolt rotate with actuator. • Adjusting plunger not installed at leading end of shoe • Plunger seal damaged or installed wrong. • Shoe return springs are weak, damaged, missing or stretched. • Adjusting bolt wound back too far. 	<ul style="list-style-type: none"> • Install pawl correctly. • Repair or replace pawl or plunger housing. • Replace pawl or actuator and lubricate. • Replace pawl spring. • Repair or replace bolt or actuator and lubricate. • Repair or replace detent or clip. • Install adjusting plunger at leading end of shoe. • Replace seal. Install correctly. • Replace shoe return springs. • Check that bolt rotates freely in actuator. Adjust brakes.
<p>Cannot attain proper brake adjustment</p>	<ol style="list-style-type: none"> 1. Clamp bolt not loose. 2. Spring washers not assembled correctly. 3. Spring washers slipped out of position. 4. Spring washers worn or damaged. 5. Adjustment procedure not followed correctly. 6. Adjusting bolt or yoke threads galled or stripped. 	<ol style="list-style-type: none"> 1. Loosen clamp bolt to finger tight. 2. Assemble spring washers into correct configuration. 3. Adjust spring washers into proper position on spring retainer. 4. Replace damaged spring washers. If brake adjustment produces over 0.060 inch (1.524 mm) lining to disc clearance, spring washers are worn out and must be replaced. 5. Repeat adjustment procedure. 6. Replace adjusting bolt and/or yoke. Apply anti- seize compound to threads.