IHC SINGLE ANCHOR

International Harvester

DESCRIPTION

These automatic adjuster brakes are two-shoe, self-centering type with brake shoe anchor at upper end of shoes above wheel cylinder. Single cylinder is double acting. Rear units contain linkage for cable operated parking brake. Automatic adjustment is accomplished by cable operated lever.

ADJUSTMENT & SERVICING

BRAKE SHOE ADJUSTMENT

Brake shoes adjust when vehicle is traveling in reverse and brakes are applied. No other adjustment is necessary. During overhaul it is sometimes necessary to back off shoes to remove wheels. This is done with a star wheel accessible through hole in brake backing plate. A thin screwdriver or similar device must be used to disengage automatic adjuster lever while making manual adjustment.

PARKING BRAKE ADJUSTMENT

Rear Wheel Integral – Adjustment is not necessary in normal service; automatic service brake adjustments also adjust parking brake. In case of brake overhaul or to compensate for stretched cables, adjust as follows: Check parking brake cables when brake shoes are fully released. If cables are loose, loosen lock nut on equalizer rod and turn nut in front of equalizer several turns forward. Turn lock nut forward against equalizer until cables are just tight enough to remove slack. **NOTE** – *Excessive tightening may pull brake shoes off their anchors.* When cables are adjusted, tighten both nuts against equalizer. Rotate wheels and check for drag. There should be no drag with properly adjusted cables. Check cables for balance: Pull parking brake lever back until rear wheels can just be turned by hand. Check wheels for even brake drag. If drag is uneven, loosen tight brake to provide even drag.

BLEEDING SYSTEM

See Hydraulic Brake Bleeding in this Section.

REMOVAL & INSTALLATION

BRAKE SHOES

Removal – 1) Secure wheel cylinder pistons with a cylinder clamp. Remove return springs from primary and secondary brake shoes. Pull adjusting lever, cable and adjuster spring down and toward rear to disconnect pivot hook from large hole in secondary shoe web. **CAUTION** – *Do not attempt to pry pivot hook out of hole.*

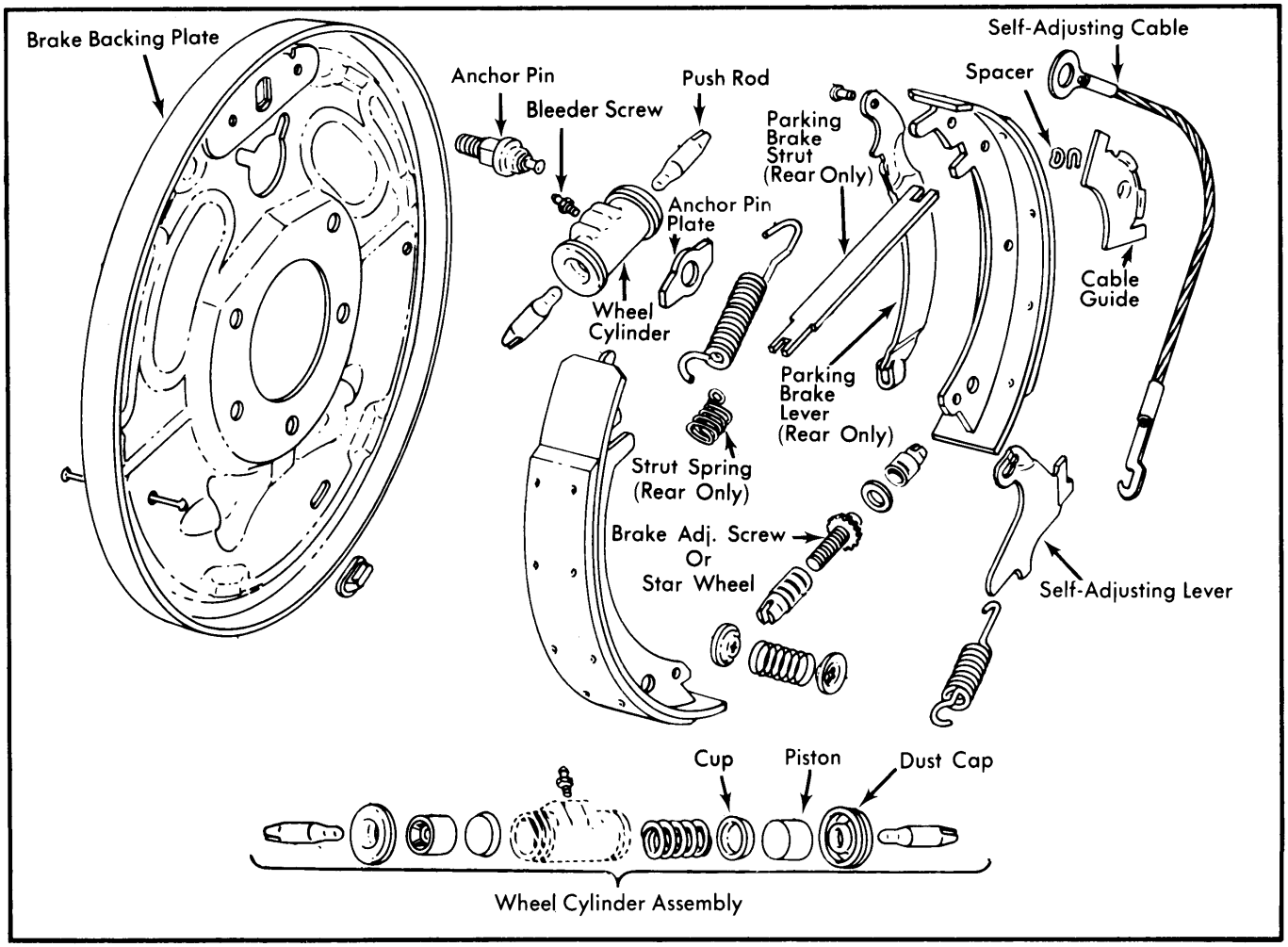

Fig. 1 Exploded View of Brake Assembly

IHC SINGLE ANCHOR (Cont.)

2) Remove adjuster lever and spring. Unhook cable eye from anchor pin and remove cable. Remove cable from secondary shoe. Remove brake shoe hold-down clips, springs, and pins; then spread shoes and lift from backing plate. Remove adjusting screw and disconnect parking brake cable from brake shoe. Remove shoe guide plate from anchor pin.

Installation – 1) Attach cable to parking brake lever by compressing cable retracting spring and sliding cable into loop at end of lever. Install adjusting screw assembly making sure that star wheel is accessible through backing plate hole. Attach shoes to backing plate with hold-down pins, springs, and cups. Assemble spring on strut against strut shoulder and assemble strut between front (primary) shoe and parking brake lever. Small loop of spring rests against inside of shoe web on right brake, and on outside of shoe web on left brake.

2) Install brake shoe guide plate on anchor pin. Position hooked end of adjuster spring completely into large hole in lower end of primary shoe. Place cable eye over anchor pin with crimped side toward shoe guide plate. Install cable on secondary shoe web with flanged hole fitted into hole in shoe web. Using a suitable lubricant (Lubriplate 110), lubricate cable where it travels over cable guide. Thread cable around cable guide groove. **NOTE** – *Be certain that cable is positioned in groove and not between cable guide and brake shoe web.* Using spring pliers, install primary and secondary brake shoe return springs.

3) Remove cylinder clamp. **NOTE** – *Be sure that cable eye is not cocked or binding on anchor pin.* Hook cable hook into hole in adjusting lever. Adjusting levers are stamped with an "R" or "L" to indicate installation on right or left brake assembly. Pull adjuster lever, cable and adjuster spring down and toward rear to engage pivot hook into large hole in secondary brake shoe return springs.

4) Check action of adjuster by pulling section of cable between cable guide and adjusting lever toward secondary shoe web far enough to lift lever past next tooth on adjusting screw star wheel. Lever should snap into position behind the next tooth. When cable is released, adjuster spring should return lever to its original position and turn adjusting screw one tooth.

WHEEL CYLINDER

Removal & Installation – To remove front wheel cylinder, carefully disconnect flexible brake line at frame. Remove bolts securing wheel cylinder to brake backing plate and remove cylinder. Remove rear wheel cylinder in a similar manner except that brake line is disconnected at cylinder, not at frame. To install, reverse removal procedure. Make sure that hydraulic lines are not twisted or kinked and that there is no sign of deterioration of flexible lines.

OVERHAUL

WHEEL CYLINDER

Disassembly & Reassembly – 1) Remove dust caps and shake pistons, cups and spring loose. **NOTE** – *Use caution when removing piston. Do not force, it will cause scoring of cylinder bore.* Clean cylinder in any commercial product so long as it is rinsed with denatured alcohol or clean brake fluid. Do not wash rubber parts with mineral base solvents such as gasoline, kerosene, carbon tetrachloride, etc.

2) After cleaning cylinder, hold it up to a strong light and sight through bore. Check for pitting, scratches and visible wear patterns. Use crocus cloth or jeweler's rouge to smooth cylinder bore. A hone may also be used provided it does not materially increase size of bore.

3) Piston fit in bore is gauged with a narrow (⅛" to ¼") .005" feeler gauge. If feeler can be inserted between piston and bore, cylinder should be replaced. If cylinder is usable, wet bore with brake fluid and dip new pistons and cups in brake fluid. Reassemble cylinder and install on brake backing plate.