SAFETY ALERT SYMBOLS
Safety Symbols alerting you to potential personal safety hazards. Obey all safety messages following these symbols.

⚠️ WARNING ⚠️
- avoid possible injury or death

⚠️ CAUTION ⚠️
- avoid possible injury and/or property damage

FOR YOUR SAFETY
READ ALL INSTRUCTIONS BEFORE OPERATING BRAKE SYSTEM

Installer: Provide this instruction to consumer.
Consumer: Keep documents for future reference.

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The installation instructions must be followed to insure safe operation of Atwood brake actuators and foundation brakes. Failure to install according to installation instructions nullifies warranty.

DRUM BRAKE APPLICATIONS:
- For best performance use Atwood Foundation Brakes with an Atwood Brake Actuator. These components are system matched.

DISK BRAKE APPLICATIONS:
- Use only Atwood 80360, 80366, 88740, 88730 Disc Brake Actuators for disc brake applications.
- Atwood Disc Brake Actuators have been tested for compatibility with Kodiak brand and Reliable brand Disc Brake Systems.
- To be used with a minimum of 4 2-1/4” diameter calipers.
- For more information call Atwood Mobile Products (815-877-5700), Kodiak Trailer Components (817-284-2324), or Reliable Tool & Machine (219-347-4000).

WARNING
PERSONAL INJURY & PRODUCT DAMAGE
- Observe maximum trailer weight for Atwood brake actuator Gross Vehicle Weight Rating (GVWR) and tongue load.
- Do not exceed these capacities. Gross Vehicle Weight Rating is total weight of trailer fully loaded including personal belongings. Know your trailer GVWR.

CAUTION
PRODUCT DAMAGE / BRAKE FAILURE
- Use only a 2” machined or forged ball with Atwood brake actuator. Ball capacity must be equal to or greater than trailer GVWR. Do not use a worn hitch ball-it is unsafe and must be replaced.
- Do not submerge actuator in water. Water may enter and corrode master cylinder, contaminating Brake System, causing brake failure.

STRAIGHT TONGUE - BOLT ON APPLICATION (FIG 1)

8000 LB. BRAKE ACTUATORS SAE CLASS 4 - DISC AND DRUM APPLICATIONS
8000 LB. GVWR, MAX. TONGUE LOAD 1000 LB. - DO NOT EXCEED THESE RATINGS
PART NO. 83005, 83010 - DRUM APPLICATION / PART NO. 80366 - DISC APPLICATION

1. Determine proper location of brake actuator on trailer tongue. Set actuator on trailer tongue, push down and back until frame stops (FIG 1-A), making contact with tongue.
2. Drill 17/32” holes in trailer tongue where bolt holes are positioned.
3. Reinforcement of trailer tongue spacer must be 1/2” ID pipe or equiv. (FIG 3-A).
4. Attach brake actuator to trailer tongue with 1/2” diameter bolts (3) S.A.E. grade 5 lockwasher (3) and nuts (3) (FIG 1-B). Torque nuts to 110-120 ft/lbs.

6000 LB. BRAKE ACTUATORS SAE CLASS 4 - DISC AND DRUM APPLICATIONS
6000 LB. GVWR, MAX. TONGUE LOAD 900 LB. - DO NOT EXCEED THESE RATINGS
PART NO. 82542, 82543, 83153, 83154, 84131, 84132, 84133, 88730, 88740

1. Determine proper location of brake actuator on trailer tongue. Set actuator on trailer tongue, push down and back until the frame stops (FIG 1-A), making contact with tongue.
2. Drill 17/32” holes in trailer tongue where bolt holes are positioned.
3. Reinforcement of trailer tongue spacer must be 1/2” ID pipe or equiv. (FIG 3-A).
4. Attach brake actuator to trailer tongue with 1/2” diameter bolts (2) S.A.E. grade 5 or greater lockwasher (2) and nuts (2) (FIG 1-B). Torque nuts to 70-80 ft/lbs.

STRAIGHT TONGUE - WELD ON APPLICATION (FIG 2)

WELDING INSTRUCTIONS
- M.I.G. OR STICK - 5/32” fillet weld minimum.
- M.I.G. WELDING - Use A.W.S. ER 70S-3 or 6 wire or equivalent with a diameter of .035 to .045. The recommended shielding gas mixture is 75% - 95% Argon & 25% - 5% CO2.
- STICK WELDING - Use E6011 A.W.S. welding rod or equivalent. Recommended machine settings for specific electrode diameter are as follows: 1/8” electrode set power between 115-130 Amps DC or 5/32” electrode set power between 140-160 Amps DC.

8000 LB. BRAKE ACTUATORS SAE CLASS 4
8000 LB. GVWR, MAX. TONGUE LOAD 1000 LB. - DO NOT EXCEED THESE RATINGS
PART NO. 83000 - DRUM APPLICATION / PART NO. 80360 - DISC APPLICATION

1. Determine proper location of brake actuator on trailer tongue. Set actuator on trailer tongue, push down and back until frame stops (FIG 2-A), making contact with tongue.
2. Using WELDING INSTRUCTIONS weld actuator to trailer with a minimum of 9” weld per side. Make a 5/32” fillet weld (FIG 2-B).
3. Make sure to return weld on front end of frame of trailer up inside actuator frame to forward frame stop (FIG 2-C).
NOTE: Carefully perform procedure in order given.
1. Plug vent hole in master cylinder boot.
2. Fully apply brake actuator.
3. Mount brake and shoe assembly to flange. Wheel cylinder must be at top of brake assembly (fig 5-B) with 4 bolts (fig 5-C). Insert brake assembly into hub and drum assembly (fig 5-D). Drum must completely cover surface of brake shoes (fig 6). Be certain brake assembly back plate does not contact drum edge (fig 6-A), and inside edges of socket, release handle must close completely and freely when released.
4. Mount drum and bearings on axle spindle, secure with washer and spindle nut.
5. Tighten spindle nut securely and then loosen or untighten) nut one quarter turn back-up lever, return to towing position freely using only return spring force. Clean off excess paint and lubricate as necessary to ensure lever assembly operates freely.

CAUTION TRAILER COULD DISCONNECT

- Do not use actuator if latching mechanism does not operate freely. Contact Atwood Service Department at 815-877-5770.

FOUNDATION BRAKES (fig 5-8)

1. Check if axle has brake flanges (fig 5-A) if so, skip step No. 2.
2. If axle does not have brake flanges, install flanges as follows:
   a. Secure flange to back of brake assembly (fig 5-B) with 4 bolts (fig 5-C).
   b. Insert brake assembly into hub and drum assembly (fig 5-D). Drum must completely cover surface of brake shoes (fig 6). Be certain brake assembly back plate does not contact drum edge (fig 6-A), and inside edges of shoes are not in contact with hub or drum.
   c. Adjust brake shoes snugly against drum by inserting brake adjusting tool (fig 7-A & B) through adjusting slot (fig 7-D). Back plate must be centered within drum diameter after adjustment. Visually check for equal space between edge of back plate and edge of drum.
   d. Mount brake/drum/flange assembly on spindle and secure with spindle nut. Be sure brake/drum/flange assembly is fully mounted on spindle.
   e. With trailer level, locate top of brake flange parallel with bottom of trailer frame (fig 8).
   f. Tack weld flange to axle (a tack weld is a small semipermanent weld used for securing).
   g. Remove brake/drum assembly.
   h. Finish welding flange securely to axle, using WELDING INSTRUCTIONS.
   i. Mount brake and shoe assembly to flange. Wheel cylinder must be at top of brake with rubber boot toward the front of trailer. For 7-inch brakes use nuts and lockwashers provided (torque to 50 ft.-lbs.).
   j. Mount drum and bearings on axle spindle, secure with washer and spindle nut.
   k. Tighten spindle nut securely and then loosen or untighten) nut one quarter (1/4) turn 90°.
   l. Check function of ball socket and latching mechanism by inserting, locking and removing a 2” diameter hitch ball. Once hitch ball is fully inserted in socket, release handle must close completely and freely when released.

MANDATORY FUNCTIONAL CHECK AFTER PAINTING

1. Check function of ball socket and latching mechanism by inserting, locking and removing a 2” diameter hitch ball. Once hitch ball is fully inserted in socket, release handle must close completely and freely when released.
2. If ball socket and latching mechanism does not close completely and freely as described above:
   a. Check for paint build-up in ball socket and clean if necessary.
   b. Lubricate ball socket and latching mechanism with SAE 30 oil and work mechanism by inserting, locking and removing a 2” diameter hitch ball until latching mechanism does work freely.
3. Move back-up lever to indicated back-up position and lock. Operate brake actuator back-up lever, return to towing position freely using only return spring force. Clean off excess paint and lubricate as necessary to ensure lever assembly operates freely.

INSTALLATION - DISC BRAKE ACTUATOR SOLENOID BACK-UP VALVE

• This system requires the solenoid wire leads be connected only into the tow vehicle back-up light circuit.

8,000 LB. ACTUATORS are equipped with a solenoid back-up valve.
1. Connect the solenoid valve wire leads to the tow vehicle back-up light circuit.
2. Connect trailer brake line to actuator.
3. Bleed brake system.
The brass orifice fitting installed in master cylinder (FIG 10A) of brake actuator.

1. Remove the plug in return port of master cylinder (this is the upper port in the master cylinder).
2. Install straight barbed fitting (torque to 16-20 in/lb).
3. Install assembly in supply port of master cylinder (this is the lower port in the master cylinder).
4. Connect the solenoid wire leads only into the reverse back-up light circuit.
5. Connect trailer brake line to actuator.
6. Bleed brake system

FOR DISC BRAKE SYSTEMS

1. Position actuator ball socket above 2” ball.
2. Hold release handle in open position (FIG 11A). Release handle must be held in fully open position to remove from or place on ball.
3. Lower trailer tongue until ball rests in ball socket.
4. Close release handle (FIG 12A). Release handle will close freely with finger pressure when ball is properly inserted into ball socket.
5. To make sure actuator is securely latched onto ball, extend trailer tongue jack to ground and lift car and trailer combination 2” to 4”. If ball does not disengage, actuator is securely attached.
6. Insert padlock or bolt through lock hole for theft protection.
7. Connect breakaway cable solidly to bumper or frame of tow vehicle as near to center as possible. Cable must hang clear of trailer tongue and long enough to permit short radius turns without pulling breakaway cable forward.
8. Make sure breakaway cable (FIG 13C) is released position with indicator bead (FIG 13B) touching or resting against cable spring stop (FIG 13A).

1. Follow step 1 through 15 for towing.
2. If equipped with solenoid valves skip to step 5.
3. Before backing up a slope or through soft ground, pull trailer forward slightly to assure actuator socket is in fully forward position.
4. Move lever knob on side of actuator downward from notch at bottom of its travel. Push lever knob down to engage locking notch.
5. Back trailer up.

BACKING UP

1. Release handle (FIG 12A) must be fully closed before towing.
2. Do not force release handle into closed position.
1. Keep all links and pivots lubricated to prevent rusting and ensure ease of operation. Use SAE 30 oil, lubricate inside release handle and inside actuator body reached from underside of actuator.

**NOTE:** Lubricate hitch ball with conventional automotive grease or a lubricant made for hitch balls.

2. Check for leaks in brake system. Periodic checks should be made on all hoses and fittings to guard against cuts and worn hoses which may cause failure (leaks, rupturing under pressure, and collapsing). Replace defective hoses.

3. Check brake fluid level in master cylinder reservoir. Keep filled to within 1/2˝ from top of reservoir. Use only DOT Type 3 or 4 brake fluid. Check electrical connections on reverse solenoid if system has one. Electrical connections should be sound and free of corrosion. Check reverse solenoid function.

4. Flush system yearly or when system is known to be contaminated. For Disc Brake Systems remove orifice fitting (ins 10) before flushing. Check fitting orifice to make sure it is clear. The orifice is .015˝ DIA it may be replaced if it is plugged with Atwood P/N # MPD 80777. The orifice fitting must be replaced after flushing the system.

**NOTE:** Wheel bearing and seals should be inspected and packed at this time.

**ADJUSTING 7", 10" & 12" DRUM BRAKES**

Trailer brakes should be adjusted after the first 1,000 miles of use and at least every 2,000 miles of use thereafter. In addition, trailer brakes should also be inspected for excessive wear, replace lining if necessary and adjusted at the beginning of each season or yearly. Wheel bearings and seals should be inspected and packed at this time.

Raise one trailer wheel at a time, chock opposite wheel to prevent trailer from rolling. Remove dust clip from adjusting slot at lower part of back side of brake assembly and insert brake adjusting tool. Adjust brake shoes out until wheels will not turn by moving end of adjusting tool toward top of brake. When this condition is felt, by rotating wheel, back-off (loosening) adjustment until wheel will just turn freely.

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**CAUTION PRODUCT & TRAILER DAMAGE**

- Before towing trailer, lever knob must be disengaged and in TOWING POSITION.

**MAINTENANCE**

**CAUTION BRAKE FAILURE**

- DO NOT fill master cylinder reservoir with used brake fluid.
- DO NOT fill reservoir beyond 1/2˝ from top.
- DO NOT overfill, brake fluid will damage paint.
- DO NOT use silicone type brake fluid.
- Yearly inspect brakes for excessive wear, replace lining if necessary.

---

**Atwood Hardware Systems & Components Limited Warranty**

Atwood Mobile Products warrants to the original consumer purchaser this product will be free of defects in material and workmanship for a period of two years from the date of purchase. Atwood’s liability hereunder is limited to the replacement of product, repair of product or replacement of product with a reconditioned product, at the discretion of the manufacturer. The warranty is void if the product has been damaged by accident, unreasonable use, neglect, tampering or other causes not arising from defects in material workmanship. The warranty extends to the original consumer purchaser of the product only, and is subject to the following conditions:

1. For two (2) year commencing with the date of purchase, Atwood will replace or repair any Hardware System & Components that are found to be defective by Atwood in material or workmanship.

2. In the event of a warranty claim, the Original Purchaser must contact the Atwood Consumer Service Department, 4750 Hiawatha Drive, Rockford, Illinois 61103-1298, Telephone: 815-877-5700 Fax: 815-877-7469. Warranty claim service must be performed as approved by the Atwood Consumer Service Department. Warranty replacement hardware systems and components or parts will be furnished freight prepaid. Labor cost to repair or replace will be limited to the amount of the original purchase price of the systems and components. The replaced warranty products or parts become the property of Atwood Mobile Products and must be returned to the Atwood Consumer Service Department freight prepaid, unless prior arrangements have been made.

3. This limited warranty is valid only when the product is applied, installed, maintained and operated in accordance with this Atwood Installation, Maintenance and Operating Manual (MPD 87984). Any deviation from these recommended specifications must be approved in writing by Atwood.

4. Any implied warranties are limited to the duration of this limited warranty as stated above. Atwood does not assume responsibility for consequential damage or loss, including loss of use of vehicle, loss of time, inconvenience, expense for gasoline, telephone, travel, lodging, loss or damage to personal properties, or loss of revenues. Some states do not allow limitations on how long an implied warranty lasts or limitations on consequential damages, so the above limitations may not apply to you. This limited warranty gives you specific legal rights which may vary from state to state.

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**Garantie limitée des systèmes d’équipement et de composants Atwood**

Atwood garantit ce produit à l’acheteur initial contre tout défaut ou vice de fabrication pendant une période de deux années à compter de la date d’achat. La responsabilité d’Atwood se limite au remplacement, à la réparation ou au remplacement du produit par un produit reconditionné à la discrétion du fabricant. Cette garantie est annulée si le produit est endommagé par accident, par une utilisation non raisonnable, par négligence, par une modification du produit ou par tout autre cause non liée au matériaux ou à un vice de fabrication. Cette garantie ne s’applique qu’à l’acheteur initial et est soumise aux conditions suivantes:

1. Durant deux (2) ans à compter de la date d’achat, Atwood remplacera ou réparera tout système ou composant dont le matériel ou la fabrication a été jugé défectueux par

2. Pour tout recours en garantie, l’acheteur initial doit communiquer avec le service à la clientèle de Atwood, 4750 Hiawatha Drive, Rockford II 61103-1298, aux numéros suivants : tél. (815) 877-5700 ou fax (815) 877-7469. Le service en période de garantie doit être effectué sur approbation du service à la clientèle de Atwood. Les systèmes et composantes ainsi que les pièces remplacés sur garantie seront fournis fret payé d’avance, le coût de la main-d’œuvre pour la réparation ou le remplacement étant limité au prix d’achat initial des systèmes ou des composantes. Les produits ou pièces remplacés durant la période de garantie deviennent la propriété de Atwood Mobile Products et doivent être retournés au service à la clientèle de Atwood, fret payé d’avance, à moins d’entente mutuelle autrement.

3. Cette garantie limitée n’est valable que lorsque le produit est appliqué, installé, entretenue et utilisé conformément au présent manuel d’installation (MPD 87984), d’entretien et de fonctionnement de Atwood. Toute déviation des spécifications stipulées dans le présent doit être approuvée par Atwood à l’écrit au préalable.

4. Toutes les garanties implicites sont restreintes à la durée de cette garantie limitée tel qu’indiqué ci-dessus. Atwood ne pourra en aucun cas être tenu responsable des dommages indirects ou des pertes encourus, incluant la privation de jouissance du véhicule, la perte de temps, les inconvénients, les dépenses reliées à l’essence, au téléphone, aux déplacements et au logement, la perte ou les dommages aux biens personnels, ou le manque à gagner. Certains états ne permettent pas de limiter la durée d’une garantie implicite ou les dommages indirects, et les restrictions ci-dessus pourraient ne pas s’appliquer à vous. La présente garantie limitée vous accorde les privilèges et les droits légaux particuliers à votre État ou province de résidence.
TROUBLE SHOOTING GUIDE

Guides are only intended for use on Atwood® products by service technicians who have successfully completed Atwood® training. This guide should be used in conjunction with appropriate Instruction Manual provided with the product and any applicable Industry Standards. This is not intended to be a complete list. Please direct questions concerning service of Atwood® products to 815-877-5700 before proceeding.

WARNING PERSONAL INJURY AND/OR PRODUCT DAMAGE

- If any of the following conditions develop, trailer must not be used until proper corrective action is taken.

### SQUEAKING, CLATTER OR CHUCKING

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>LACK OF HITCH BALL LUBRICATION</td>
<td>Lubricate with conventional automotive grease or commercial lubricant made for hitch balls</td>
</tr>
<tr>
<td>BINDING LINKAGE &amp; PIVOTS ON BRAKE ACTUATOR</td>
<td>Oil linkage &amp; pivots on brake actuator</td>
</tr>
<tr>
<td>LOOSE HITCH</td>
<td>Inspect hitch &amp; tighten</td>
</tr>
<tr>
<td>LOOSE HITCH BALL</td>
<td>Inspect hitch &amp; tighten</td>
</tr>
<tr>
<td>ACTUATOR LOOSE ON TRAILER FRAME</td>
<td>Inspect brake actuator &amp; tighten</td>
</tr>
<tr>
<td>HITCH BALL WORK OR TOO SMALL</td>
<td>Replace</td>
</tr>
<tr>
<td>OVERHEATED BRAKES</td>
<td>Replace wheel bearing</td>
</tr>
<tr>
<td>BROKEN BRAKE DRUM(S)</td>
<td>Replace brake drum(s) &amp; check brake shoes</td>
</tr>
<tr>
<td>LOW BRAKE FLUID LEVEL</td>
<td>Fill &amp; bleed brakes, per IOM instructions</td>
</tr>
<tr>
<td>WORN OUT SHOCK ABSORBER</td>
<td>Replace</td>
</tr>
<tr>
<td>PARTIAL APPLICATION OF BREAKAWAY CABLE</td>
<td>Fully release breakaway cable</td>
</tr>
<tr>
<td>BRAKES IMPROPERLY ADJUSTED</td>
<td>Check brakes for adjustments per IOM instructions</td>
</tr>
<tr>
<td>BROKEN BRAKE RETURN SPRING</td>
<td>Replace return spring</td>
</tr>
<tr>
<td>SEIZED ACTUATOR MASTER CYLINDER</td>
<td>Replace/rebuild actuator master cylinder</td>
</tr>
<tr>
<td>WORN OUT BRAKE SHOES</td>
<td>Replace brake shoes and check brake drums</td>
</tr>
<tr>
<td>LEAKY WHEEL CYLINDER</td>
<td>Replace/rebuild wheel cylinders and replace brake shoes. Clean drums and other hardware</td>
</tr>
</tbody>
</table>

### RELEASE HANDLE DOES NOT CLOSE EASILY

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oversized ball</td>
<td>Check ball size</td>
</tr>
<tr>
<td>Ball not fully inserted into socket</td>
<td>Check for proper ball size. Check to see if tongue jack is fully retracted. Hold release handle open when inserting ball.</td>
</tr>
<tr>
<td>Foreign material in actuator socket</td>
<td>Clean and lubricate</td>
</tr>
</tbody>
</table>

### BRAKE OVERHEATING, SIDE PULL, BRAKES DO NOT OPERATE, POOR BRAKE PERFORMANCE

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only one brake is applying</td>
<td>Check brake adjustment per IOM instructions.</td>
</tr>
<tr>
<td>Leaking wheel cylinder</td>
<td>Check and replace wheel cylinder and bleed brakes per IOM instructions.</td>
</tr>
<tr>
<td>Seized wheel cylinder piston</td>
<td>Check and rebuild/replace wheel cylinder and bleed system per IOM instructions.</td>
</tr>
<tr>
<td>Foreign material in brake unit</td>
<td>Clean thoroughly</td>
</tr>
<tr>
<td>Low hydraulic fluid level</td>
<td>Fill and bleed brakes, per IOM instructions</td>
</tr>
<tr>
<td>A bent shoulder bolt</td>
<td>Replace</td>
</tr>
<tr>
<td>A bend push rod in the shock absorber</td>
<td>Replace shock absorber</td>
</tr>
<tr>
<td>A damaged socket assembly</td>
<td>Replace actuator</td>
</tr>
<tr>
<td>Broken/pinched brake lines</td>
<td>Replace</td>
</tr>
<tr>
<td>Brake actuator frame damaged</td>
<td>Replace actuator</td>
</tr>
<tr>
<td>Worn brake shoe(s)</td>
<td>Replace brake shoe(s)</td>
</tr>
</tbody>
</table>

### TOWING VEHICLE SHAKING BACK AND FORTH

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worn vehicle suspension</td>
<td>Replace shock absorber</td>
</tr>
<tr>
<td>Hitch not secure</td>
<td>Tighten all bolts and nuts</td>
</tr>
<tr>
<td>Under-sized hitch ball</td>
<td>Ball should be 2˝ machined/forged type</td>
</tr>
</tbody>
</table>

EXTENDED STORAGE INSTRUCTIONS

Preventive maintenance is recommended for extended periods of storage.

1. Check brake system for proper fluid level in master cylinder, bleed all lines.
2. Lubricate all links and pivots to prevent any rusting.
3. Remove wheel and drum assemblies and spray a good anti-corrosion compound (CRC formula 5-56) under rubber boot on forward end of brake wheel cylinder. Avoid spraying drum and brake lining.
4. Grease all bearings and reinstall wheel and drum assemblies.
5. Make sure breakaway cable is fully released.
6. After extended storage refer to MAINTENANCE Steps 1 through 5, to insure trailer readiness for towing.
7. Adjust drum brakes

PROPER TOWING CHECKLIST

- Inspect brake fittings for leaks.
- Adjust brakes every 2000 miles.
- Lubricate all mechanical moving parts.
- Inspect the breakaway cable for any kinks.
- Verify a one-piece 2˝ ball is used, without chips, dirt or hairline cracks.
- Securely attach safety chains to trailer and tow vehicle.
- For proper braking, trailer should set level when attached to tow vehicle to produce a positive tongue load.
- DOT 3 or DOT 4 brake fluid should be used in master cylinder and fill it from 1/2 full to 1/2˝ from top of cylinder reservoir.
HYDRAULIC BRAKE ACTUATORS

TO ORDER: All kit available for field replacement are numbered. Parts illustrated but not numbered are not available for field replacement. Contact factory service department for further information.

NOTE: Save all attaching hardware when disassembling.

<table>
<thead>
<tr>
<th>KIT #</th>
<th>DESCRIPTION</th>
<th>REPLACEMENT KIT INCLUDES</th>
</tr>
</thead>
<tbody>
<tr>
<td>85830</td>
<td>SHOCK ABSORBER</td>
<td>4, 24-2 EA., 28-2 EA., 29-2 EA.</td>
</tr>
<tr>
<td>87478</td>
<td>CAP</td>
<td>15</td>
</tr>
<tr>
<td>85842</td>
<td>SHOULDER BOLT</td>
<td>20, 21, 24-2 EA., 25, 26, 27</td>
</tr>
<tr>
<td>85844</td>
<td>RELEASE HANDLE</td>
<td>5, 13, 18, 22, 24-3 EA., 30</td>
</tr>
<tr>
<td>85849</td>
<td>STOP &amp; SPRING ASSEMBLY</td>
<td>9, 11, 14, 24</td>
</tr>
<tr>
<td>85852</td>
<td>PUSH ROD ASSEMBLY</td>
<td>3, 7, 11, 14-5 EA., 16, 17, 24-2 EA., 34, 8, 9</td>
</tr>
<tr>
<td>84258</td>
<td>BOOT</td>
<td>8</td>
</tr>
<tr>
<td>80777</td>
<td>ORIFICE- DISC BRAKE APPLICATIONS ONLY</td>
<td>31</td>
</tr>
<tr>
<td>85837</td>
<td>MASTER CYLINDER-PUSH ROD KIT</td>
<td>3, 6, 7, 8, 9, 11, 14-5 EA., 16, DRUM BRAKE APPLICATION 17, 24-2 EA., 34</td>
</tr>
<tr>
<td>85841</td>
<td>MASTER CYLINDER</td>
<td>6, 7, 14-4 EA. DRUM BRAKE APPLICATION MUST ORDER 84258 SEPARATELY</td>
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<td>85838</td>
<td>MASTER CYLINDER-PUSH ROD KIT</td>
<td>3, 6, 7, 8, 9, 11, 14-5 EA., 16, DISC BRAKE APPLICATION 17, 24-2 EA., 34, 15</td>
</tr>
<tr>
<td>85840</td>
<td>MASTER CYLINDER</td>
<td>6, 7, 14-4 EA. DISC BRAKE APPLICATION MUST ORDER 84258 SEPARATELY</td>
</tr>
</tbody>
</table>

ATWOOD 7˝ UNI-SERVO BRAKES

84210 NEW STYLE Wheel Cylinder Kit (one axle only)
1 (1) WHEEL CYLINDER, R.H.
1A (1) WHEEL CYLINDER, L.H.
15 (4) 5/16˝ - 18 X 3/4˝ CAP SCREW
14 (2) 5/16˝ - 18 FLAT HEAD SCREW
19861 Shoe & Lining Kit (one axle)
5 (2) PRIMARY SHOES WITH LINING
6 (2) SECONDARY SHOES WITH LINING
23400 Spring Kit (one axle)
8 (2) ADJUSTING SCREW SPRINGS
9 (2) SECONDARY RETRACTOR SPRINGS
7 (1) TORSION SPRING R.H.
7A (1) TORSION SPRING L.H.
13 (4) SHOE HOLD DOWN SPRINGS
18191 17 Dust Clip
23401 Adjusting Screw, Pivot Socket & Nut Assembly
10 (1) NUT
12 (1) PIVOT SOCKET
11 (1) ADJUSTING SCREW

ATWOOD 10˝ UNI-SERVO BRAKES

21669 Wheel Cylinder Replacement Kit (one axle)
6 (1) WHEEL CYLINDER, R.H.
6 (1) WHEEL CYLINDER, L.H.
19 (4) 5/16˝ - 8 X 1/2˝ MOUNTING SCREWS
19862 Brake Shoe and Lining Kit (one axle)
12 (2) PRIMARY SHOES WITH LINING
13 (2) SECONDARY SHOES WITH LINING
23385 Brake Shoe Spring & Hold Down Kit (one axle)
8 (4) PRIMARY AND SECONDARY RETRACTOR SPRINGS
14 (2) ADJUSTING SCREW SPRINGS
21 (4) SHOE HOLD DOWN PINS
11 (4) SHOE HOLD DOWN SPRINGS
10 (8) SHOE HOLD DOWN WASHERS
18499 9 (2) Shoe Guide Plate
23401 Adjusting Screw, Pivot Socket & Nut Assembly
15 & 16 (1) NUT AND SCREW
17 (1) PIVOT SOCKET
18191 20 (2) Dust Clip
7 (2) Bleeder Nut - not available separately