

VOLUME 2

ACTUATORS



TITAN MOVES THE WORLD™

TABLE OF CONTENTS

ACTUATOR DESIGN FEATURES.....	4
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ACTUATOR RECOMMENDED APPLICATIONS....	4
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TECHNICAL DRAWINGS.....	5
--------------------------------	----------

SURGE BRAKING	6
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BRAKERITE7-11

BRAKERITE AND BRAKERITE II.....	7
BRAKERITE II SD	8
BRAKERITE II RF.....	9
BRAKERITE PLUG AND PLAY.....	10
BRAKERITE ACCESSORIES.....	11

MODEL 6012-13

LEVERLOCK	12
PARTS DIAGRAM.....	12
MULTI-FIT	13
PARTS LIST	13

MODEL 60 ZX700014-15

ZX7000 LEVERLOCK	14
ZX7000 PARTS DIAGRAM.....	14
ZX7000 MULTI-FIT	15
ZX7000 PARTS LIST	15

AERO 750016-17

WITH LOCKOUT LEVER	16
PARTS DIAGRAM.....	16
SWINGAWAY	17
AERO 7500 SWINGAWAY PRODUCT LIST	17
PRODUCT LIST.....	17
PARTS LIST	17

MODEL 618-23

2-5/16" BALL COUPLER	18
A-FRAME WITH LUNETTE EYE	18
A-FRAME WITH 2-5/16" BALL COUPLER	18
A-FRAME WITH MULTI-FIT BALL COUPLER.....	19
STRAIGHT WITH LUNETTE EYE	19
MULTI-FIT BALL COUPLER.....	19
LEVELER CHANNEL (4).....	20
LEVELER CHANNEL (6).....	20
2" LEVERLOCK COUPLER.....	21
A-FRAME WITH 2" LEVERLOCK COUPLER.....	21
PARTS DIAGRAM.....	22
PRODUCT LIST.....	23
PARTS LIST	23

MODEL 1024-31

2-5/16" DROP COUPLER WITH MOUNTING CHANNEL	24
2-5/16" DROP COUPLER LESS MOUNTING CHANNEL	24
STRAIGHT WITH 2-5/16" COUPLER AND MOUNTING CHANNEL	24
STRAIGHT WITH 2-5/16" COUPLER LESS MOUNTING CHANNEL	25
LEVELER CHANNEL (4) AND MOUNTING CHANNEL	25
LEVELER CHANNEL (4) LESS MOUNTING CHANNEL.....	26
CENTERED LEVELER CHANNEL (6) AND MOUNTING CHANNEL	26
OFFSET LEVELER CHANNEL (6) LESS MOUNTING CHANNEL	27
STRAIGHT LESS COUPLER WITH MOUNTING CHANNEL....	28
STRAIGHT LESS COUPLER LESS MOUNTING CHANNEL....	28
STRAIGHT WITH LUNETTE EYE	28
PARTS DIAGRAM.....	30
PRODUCT LIST.....	30-31
PARTS LIST	31



MODEL 20 32-41

2-5/16" DROP COUPLER WITH MOUNTING CHANNEL	32
2-5/16" DROP COUPLER LESS MOUNTING CHANNEL	32
2-5/16" STRAIGHT LESS MOUNTING CHANNEL	33
LEVELER CHANNEL (4) AND MOUNTING CHANNEL 14K.....	33
LEVELER CHANNEL (4) AND MOUNTING CHANNEL 20K.....	33
LEVELER CHANNEL (4) LESS MOUNTING CHANNEL 14K.....	34
LEVELER CHANNEL (4) LESS MOUNTING CHANNEL 20K.....	34
CENTERED LEVELER CHANNEL (6) AND MOUNTING CHANNEL 20K.....	35
OFFSET LEVELER CHANNEL (6) LESS MOUNTING CHANNEL 20K.....	36
LESS COUPLER AND MOUNTING CHANNEL	37
STRAIGHT WITH LUNETTE EYE LESS MOUNTING CHANNEL	37
LUNETTE EYE AND MOUNTING CHANNEL	38
4" MOUNTING CHANNEL	38
MODEL 20 PARTS DIAGRAM.....	39
PRODUCT LIST.....	40
PARTS LIST	41

DISC BRAKE KITS 42-43

AERO 7500 SINGLE AND TANDEM AXLE.....	42
SWINGAWAY SINGLE AND TANDEM AXLE	42
MODEL 60 ZX7000 SINGLE AND TANDEM AXLE.....	43
BRAKERITE AND BRAKERITE II TANDEM AXLE.....	43

WARRANTY.....44

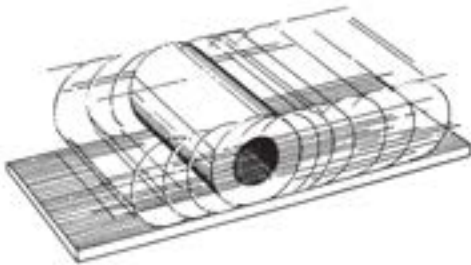
SAFETY WARNING45



TOUGH. DURABLE. BUILT TO LAST.™



DESIGN FEATURES | ACTUATOR MOVEMENT



The straight line movement of the actuator is accomplished by using rollers to reduce resistance so that the kinetic energy of a loaded trailer can be translated into braking effort.

This design consists of a tubing assembly to meet applicable specifications for tongue load plus needed strength for side load. The side load strength is particularly to resist bending in jackknife situations.

TITAN ACTUATOR RECOMMENDED APPLICATIONS

MODEL 60

- 6,000 lb. max. gross load, 600 lb. max. tongue load
- For recreational, boat, baggage and other light occasional-use trailers, which are towed by passenger cars and pickups

MODEL 60 ZX7000

- 7,000 lb. max. gross load, 700 lb max tongue load
- For recreational, boat, baggage and other light occasional-use trailers, towed by passenger cars and pickups

AERO 7500 (also available in swingaway version)

- 7,500 lb. max. gross load, 750 lb. max. tongue load
- Equipped with lock-out lever for backing up
- For recreational, boat, baggage, and other light occasional-use trailers, which are towed by passenger cars and pickups

MODEL 6

- Multi-fit and 2" Leverlock: 6,000 lb. max. gross load, 600 lb. max. tongue load
- 2-5/16" Ball and 3" lunette eye: 8,000 lb. max. gross load, 600 lb. max. tongue load
- For recreational trailers subject to more frequent use, light utility trailers and light occasional-use industrial trailers, towed by passenger cars and pickups

MODEL 10

- 12,500 lb. max. gross load, 1,250 lb. max. tongue load
- For heavier recreational and light industrial trailers, towed by passenger cars and pickups

MODEL 20

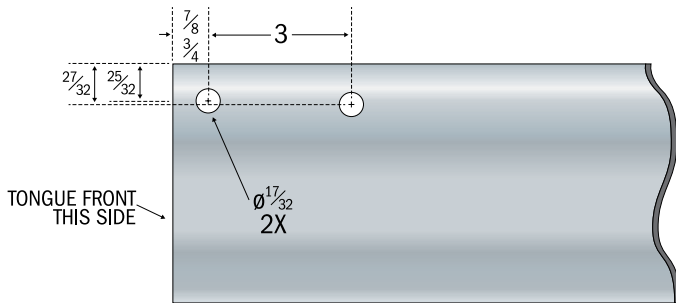
- Fixed coupler and lunette eye: 20,000 lb. max. gross load, 2,000 lb. max. tongue load
- Adjustable clevis hitch and adjustable 3" lunette eye: 20,000 lb. max. gross load, 2,000 lb. max. tongue load
- Adjustable 2-5/16" ball: 14,000 lb. max. gross load, 1,400 lb. max. tongue load
- For heavy or frequent-use applications, and for trailers pulled by trucks larger than standard pickups
- Typical uses include industrial equipment trailers, agricultural spreaders, tank trailers and wagons, utility reel and pole trailers, and military ground support equipment

BRAKERITE (Electric-Hydraulic Actuator)

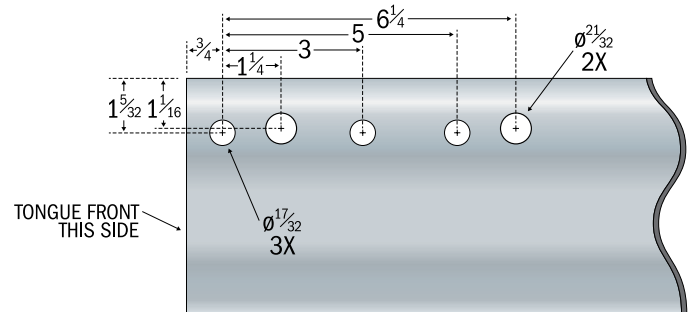
- For light to heavy duty utility, recreational, agricultural and travel trailers towed by vehicles with the capacity to tow the gross vehicle weight rating for the trailer.

MOUNTING CHANNEL TEMPLATES

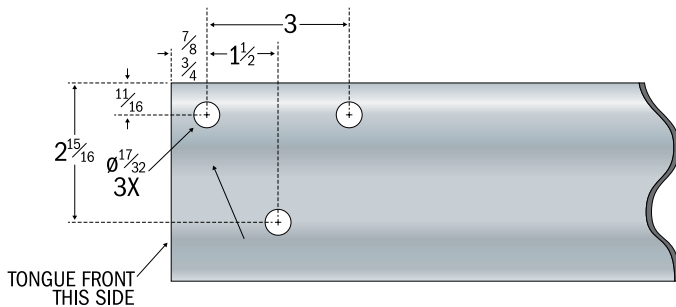
MODEL 60 ▼



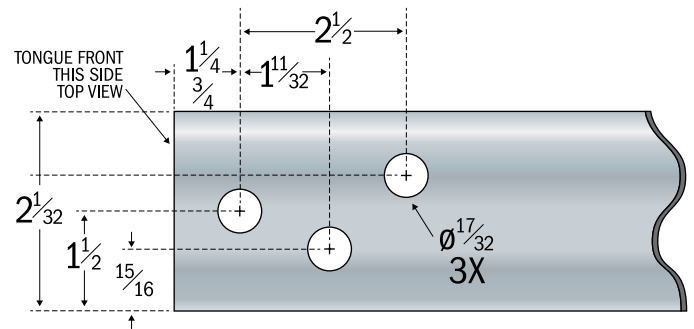
▼ MODEL 6



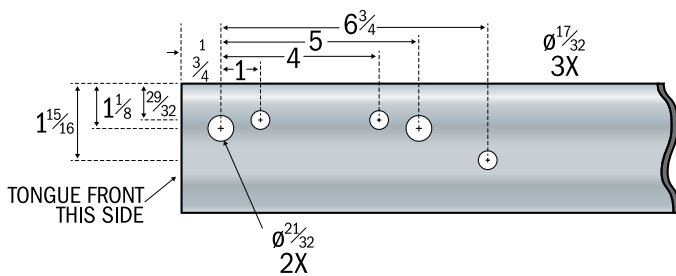
AERO 7500 ▼



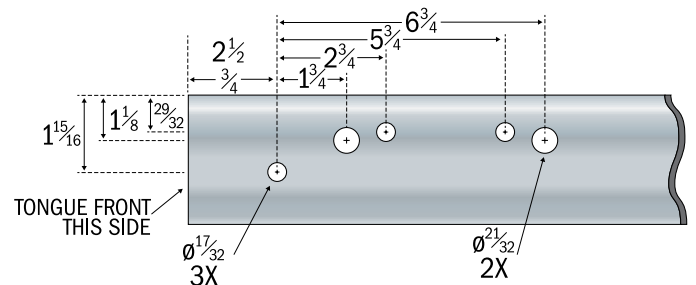
▼ AERO 7500 SWINGAWAY



MODEL 10 AND 20 (1" OFFSET) ▼

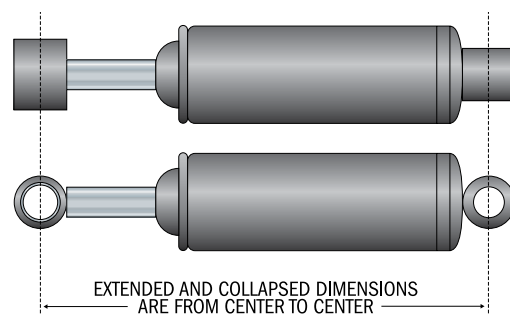


▼ MODEL 10 (2-1/2" OFFSET)



DAMPER DIMENSIONS ▼

Actuator	Damper	Extended Length	Collapsed Length
MODEL 60	2336200	6.25 ± .125	4.93 ± .125
AERO 7500	4502000	6.25 ± .125	4.93 ± .125
MODEL 6	1242600	8.07 ± .125	6.00 ± .125
MODEL 10	1242600	8.07 ± .125	6.00 ± .125
MODEL 20	7784000	12.13 ± .125	8.16 ± .125





TITAN TRAILER COMPONENTS

Titan has a rich heritage in the hydraulic brake and actuator industry. Many of the products in use today are based on our designs. We invented and held the first patent on free backing brakes and have led the way on a wide variety of product innovations.

Titan's extensive line of brakes, actuators, couplers and hubs are designed to serve a wide variety of trailer applications. Manufacturers of boat, recreation vehicle, livestock, travel and flatbed trailers rely on the performance of our products.

To learn more about our other trailer component product lines, please reference our Brake Components and Couplers/Miscellaneous catalogs.



INTRODUCTION TO SURGE BRAKING

Surge braking is accomplished by replacing a trailer's standard tongue coupler with an actuator and adding hydraulic brake assemblies. The "surge" or "push" of the trailer toward the tow vehicle during deceleration automatically synchronizes these trailer brakes with the tow vehicle brakes. As the trailer pushes against the vehicle, the actuator telescopes together and applies force to its master cylinder, supplying hydraulic pressure to the trailer's brakes.

Surge actuators of this type provide a service life of approximately five years with proper installation, usage and maintenance. However, a well-cared-for actuator can often exceed this estimate. To get the most benefit from your Titan surge actuator, follow the instructions given in this catalog and use common sense in caring for the Titan brake actuator and your entire trailer brake system.



BRAKERITE and BRAKERITE II



BRAKERITE EHB

A proven track record of performance and reliability, designed to be hard wired into your trailer's electrical system. All components self-contained under the BrakeRite cover.

1500 PSI - BRAKERITE EHB

Part No.	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Quantity
4813100	Disc	Std	10.5	24

1000 PSI - BRAKERITE EHB

Part No.	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Quantity
4822500	Drum	Std	10.5	24



BRAKERITE II

Designed for severe duty applications using external control modules for specific applications. Control modules have plug-in weather sealed connectors.

The BrakeRite II is used with either the BrakeRite II SD or BrakeRite II RF kits to match your specific trailering application.

BRAKERITE II

Part No.	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Quantity
4835700	Disc/Drum	Std	10.5	24

Titan has been a pioneer in the Electro Hydraulic Brake (EHB) actuator industry beginning in the early 1990s. In the new millennium, Titan developed and tested the BrakeRite EHB that was introduced in early 2002.

The features of the **BrakeRite EHB** and the **BrakeRite II** include:

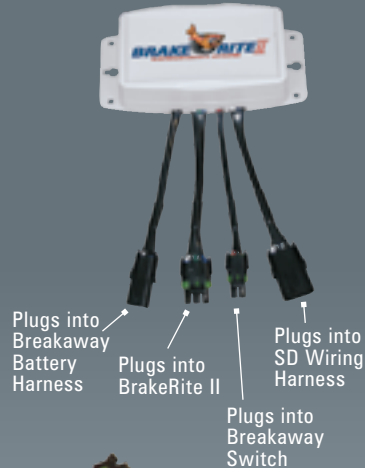
- First in the field with an electronic proportional pressure valve
- The most rapid response from brake actuation to total dynamic braking in the industry
- Hybrid electronic control board compatible with most in-cab brake controllers
- Ongoing plant performance testing and each production unit is bench tested
- Research and development is standard at Titan
- Pump/motor based
- Isolated fluid reservoir with diaphragm type valve filler cap

BRAKERITE II SD

#1 - BRAKERITE II



#2 - SD CONTROL MODULE



#3 - SD WIRING HARNESS



#4 - BREAKAWAY BATTERY HARNESS



#5 - BREAKAWAY BATTERY SWITCH



BRAKERITE II SEVERE DUTY

The BrakeRite II - Severe Duty utilizes the proven technology and performance of the BrakeRite EHB; however, the installation process has been simplified in the new model.

The features of the BrakeRite II - Severe Duty include:

- Utilizes the standard proven EHB electronic control board, potted and enclosed in a remote mounted control module
- Provides complete plug-in wiring harnesses to simplify field installation
- In the event of field service, component replacement is simplified
- Potted hybrid circuitry provides dependable service under adverse conditions

BRAKERITE II SD Kit (includes everything listed above)

Part No.	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Quantity
4835700	Disc/Drum	Std	13	24

For drum brakes use reducer #4844100
Custom made harnesses are available upon request.
Contact your sales representative for details.

BRAKERITE II SD Parts List

Reference No.	Part No.	Part Description
1	4834100	BrakeRite II
2	4834200	SD Control Module
3	4834300	SD Wiring Harness
4	4834400	BrakeRite II Breakaway Battery Harness
5	4834500	BrakeRite II Breakaway Battery Switch

BRAKERITE II RF



BRAKERITE II RF

The BrakeRite II - RF applies the outstanding BrakeRite EHB performance with radio frequency control to provide quality braking for trailers to be towed by vehicles without the standard, hard wired in-cab brake controllers.

This system incorporates the latest in deceleration sensing by utilizing an accelerometer chip in the hybrid circuitry to apply the trailer brakes in proportion to the tow vehicle braking. The in-cab controller manual override is transmitted by RF (radio frequency) to the control module and is powered by the in-cab power outlet (cigarette lighter).

The features of the BrakeRite II - RF include:

- Utilizes basic EHB electro-mechanical feature proven in field use
- Has potted hybrid circuitry that functions even in severe environmental conditions
- Plug-in technology provides for ease of installation and/or field service

BRAKERITE II RF Kit (includes everything listed above)

Part No.	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Quantity
4835600	Disc/Drum	Std	10.5	24

For drum brakes use reducer #4844100
Custom made harnesses are available upon request.
Contact your sales representative for details.

BRAKERITE II RF Parts List

Reference No.	Part No.	Part Description
1	4834100	BrakeRite II
2	4835100	RF Control Module
3	4835500	RF Wiring Harness
4	4835200	RF In-Cab Controller
5	4834400	BrakeRite II Breakaway Battery Harness
6	4834500	BrakeRite II Breakaway Battery Switch

BRAKERITE PLUG AND PLAY

With optional Australian Plug

4813102 BrakeRite



- Easy install
- No wiring
- Fastest response time
- Large reservoir/triple axles
- Optional Australian 12-pin plug



STANDARD 4813102PP

Includes: 4813102 BrakeRite
 4834402 Breakaway battery harness
 4834500 Breakaway battery switch harness
 4834300 Standard 7-pin harness



AUSTRALIAN 4813102A

Includes: 4813102 BrakeRite
 4834402 Breakaway battery harness
 4862800 Australian 12-pin flat harness*

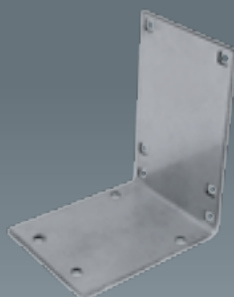
*Includes breakaway switch

BRAKERITE ACCESSORIES

#1 - GEL CELL BREAKAWAY KIT



#2 - ANGLE MOUNTING BRACKET



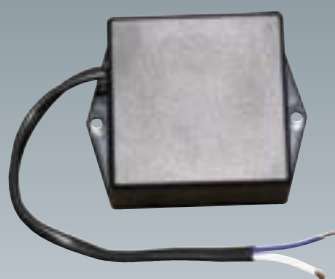
#3 - DRUM BRAKE REDUCER



#4 - FORD/CHEVY ADAPTER (SD)



#5 - FORD/CHEVY ADAPTER (EHB)



BRAKERITE EHB ACCESSORIES

Reference No.	Part No.	Part Description
1	4822100	Gel Cell Breakaway Kit with 2 batteries
2	4821800	Angle Mounting Bracket - unpainted
3	4844100	Drum Brake Reducer (SD and RF only)
4	4845900	Ford/Chevy Adapter (SD)*
5	4846000	Ford/Chevy Adapter (EHB)*

* NOTE: Needed for Ford and Chevy vehicles with integral low package on 2006.5 and up models

WARNING! Before using trailer always check:

- 1) Brake fluid level must be maintained between three-eighths and three-quarters of an inch of filler cap opening.
- 2) Prior to moving coupled units check unit to be certain system is functioning properly (consult owner's manual).
- 3) Prior to moving coupled units CHECK BREAKAWAY PROTECTION. NEVER ATTEMPT TO MOVE/USE THE TRAILER if the breakaway battery is not fully charged.

- 4) DO NOT RELY ON towed vehicle brakes for entire unit braking. The towed vehicle brake is only to supplement the braking system on the towing vehicle, NOT TO STOP THE ENTIRE UNIT.
- 5) ALWAYS operate unit within prudent parameters and obey all laws.

BrakeRite Limited Warranty:

Eligibility: You are eligible for the benefits of this limited warranty if you are the original end-user purchaser of this BrakeRite EHB and if the unit has been used only on the vehicle in which it was first installed.

What Is Covered: Titan Tire warrants this product to be free from defects in material and workmanship for 18 months after the date of manufacture or one year from the date of retail sale, whichever occurs first, when properly installed, used and maintained.

What Is Not Covered: The warranty does not apply to damage or loss caused by any of the following circumstances or conditions:

1. Freight damage
2. Misapplication, misuse, modification, or failure to follow the directions or observe cautions and warnings on installation, wiring, operation, application, inspection or maintenance specified in any Titan specification sheet, instruction and installation manual.
3. Using parts, accessories or components not specified in Titan's specification sheet, instruction and installation manual or approved by Titan in writing.

Conditions and Limitations: Titan Tire's liability and purchaser's remedy are expressly limited, at Titan's sole option, to the repair or replacement of the defective product. For the warranty to apply, Titan must receive notice of the alleged defect within 30 days of i) the alleged defect or ii) the expiration of the warranty period, whichever is earlier. Any claim not made within this period shall conclusively be deemed void. Titan reserves the right to request that the product be returned to Titan, intact and postage prepaid, prior to processing a warranty claim.

Titan shall not be liable for loss of use of the unit, or any other incidental or consequential costs, expenses or damages incurred by the purchaser.

Some states do not allow the exclusion or limitation of implied warranties, incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

To Receive Benefits Under This Warranty: Contact Titan Tire at the address or phone number below to obtain an authorization for return:

Titan Tire Corporation
Attention Warranty Dept.
2345 E. Market Street
Des Moines, IA 50317
800-832-8781

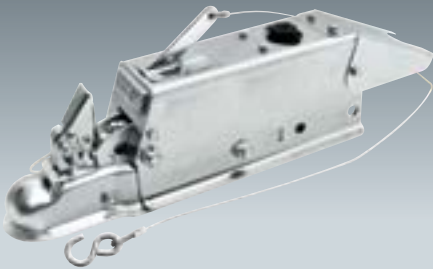
The product must be returned, shipping costs prepaid, insured to the factory for evaluation.

The following information should be available when contacting the factory and must accompany the return, legibly prepared: i) name, address and telephone number of purchaser, ii) proof of purchase including date, iii) model and serial number of the unit, iv) name and address of the dealer where the unit was purchased, v) description of the alleged defect.

These terms and conditions represent the entire Titan BrakeRite EHB warranty, and no terms or conditions in any way adding to, modifying or otherwise altering the provisions stated herein shall bind Titan unless in writing signed by Titan.

MODEL 60 LEVERLOCK

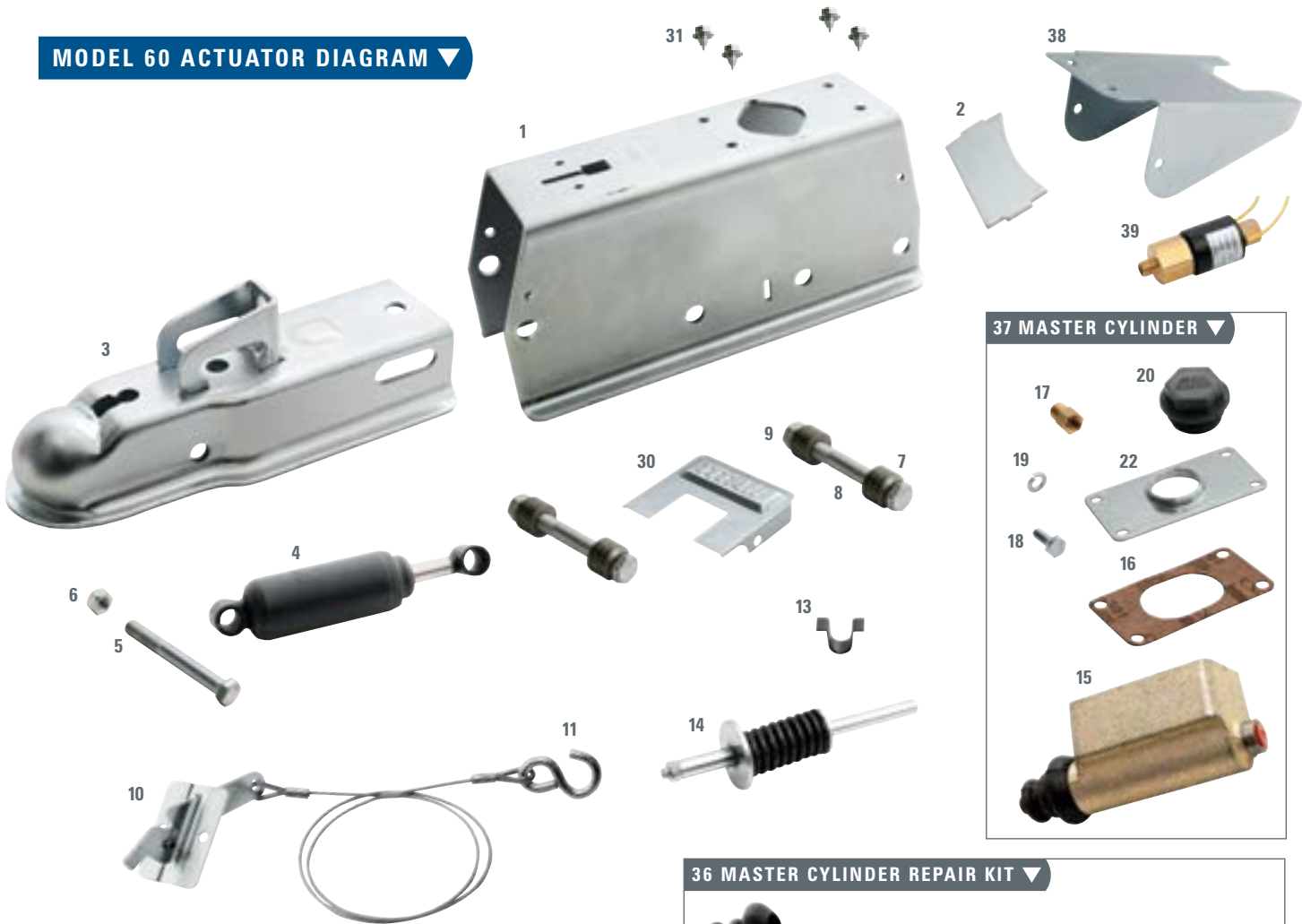
6,000 pound capacity, max. GVWR, 600 pound tongue load.
GVWR limited to ball rating.



Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
4338600	4332900	Drum	Std	20	36	2336100042	4395100	4358400	3" Tongue
4819900	4715400	Disc	Std	20	36	4714200042	4820000	4358400	3" Tongue
N/A	4715410	Disc	Std	20	30	4714200042	4820000	4358400	3" Tongue
N/A	4715420	Disc	Std	20	30	4714200042	4820000	4358400	3" Tongue

NOTE: For 3" wide trailer tongue. Fits 1-7/8", 50 mm and 2" ball (some adjustment required).
PRIMED PARTS ARE NON-STANDARD

MODEL 60 ACTUATOR DIAGRAM ▼



37 MASTER CYLINDER ▼



36 MASTER CYLINDER REPAIR KIT ▼



35 LEVERLOCK PARTS ▼



34 MULTI-FIT PARTS ▼



MODEL 60 MULTI-FIT



6,000 pound capacity, max. GVWR, 600 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
4339900	4339700	Drum	Std	20	36	2336100042	4395100	4045400	3" Tongue
4815200	4745700	Disc	Std	20	36	4714200042	4820000	4045400	3" Tongue
N/A	4745710	Disc	Std	20	30	4714200042	4820000	4045400	3" Tongue
N/A	4745720	Disc	Std	20	30	4714200042	4820000	4045400	3" Tongue

NOTE: For 3" wide trailer tongue. Fits 1-7/8", 50 mm and 2" ball. PRIMED PARTS ARE NON-STANDARD

MODEL 60 ACTUATOR PARTS LIST

Ref No.	Part No.	Description	Multi-Fit Plated	Multi-Fit Painted	LeverLock Plated	LeverLock Painted
1	4863800	Outer Case	1		1	
1	4338700	Outer Case		1		1
2	2337700	Strut	1	1	1	1
3	2337800	Coupler Case	1			
3	4097000	Coupler Case		1		
3	4332500	Coupler Case			1	
3	4338800	Coupler Case				1
4	2336200	Shock Absorber	1	1	1	1
5	2339000	Bolt, Hex 7/16" NF x 2-5/8"	1	1	1	1
6	2339100	Locknut, Hex 7/16" NF Thin	1	1	1	1
7	2327800	Roller	4	4	4	4
8	4861300	Bolt, Hex 1/2" NF x 3-3/4" (Grade 8)	2	2	2	2
9	4861400	Locknut, Hex 1/2" NF	2	2	3	3
10	4623800	Breakaway Assy. With Pin, Cover, S-Hook	1	1	1	1
11	1055500	S-Hook - Included with 4623800	1	1	1	1
13	4005200	Breakaway Spring	1	1	1	1
14	2346300	Push Rod Assembly	1	1	1	1
15	2336100042	Master Cylinder - Drum Brake	1	1	1	1
15	4714200042	Master Cylinder - Disc Brake	1	1	1	1
16	2341400	Gasket	1	1	1	1
17	1209800	Connector, 1/64" Orifice - Drum Brake	1	1	1	1
17	4750300	Connector - Disc Brake	1	1	1	1
18	1050800	Bolt, Hex 1/4" NC x 3/4"	4	4	4	4
19	0794000	Lock Washer 1/4"	4	4	4	4
20	4480701	Filler Cap, Diaphragm Type	1	1	1	1
22	2356600	Cover, Master Cylinder	1	1	1	1
23	2338100	Latch Bolt	1	1		
24	1809000	Lock Plate	1	1	1	1
25	4335800	Ball Latch	1	1	1	1
26	4336800	Spring	1	1	1	1
27	2338300	Hand Wheel Lock	1	1		
28	2420000	Hand Wheel	1	1		
29	2496400	Lock Ring	1	1		
30	2452500183	Cover, Front, Plated	2		2	
30	2452500317	Cover, Front, Painted		2		2
31	4861200	Screw, Cover	6	6	6	6
32	4358500	Handle Assembly			1	1
33	4334500	Spring Plate			1	1
34	4045400	Multi-fit Coupler Repair Kit	1	1		
35	4358400	Leverlock Coupler Repair Kit			1	1
36	1502600	Master Cylinder Repair Kit Wagner, 1" Bore	1	1	1	1
37	4395100	Master Cylinder Kit, Drum Brakes, 1.25" Bore	1	1	1	1
37	4820000	Master Cylinder Kit, Disc Brakes, 1.25" Bore	1	1	1	1
38	4835800183	Solenoid Valve Cover, Plated	1		1	
38	4835800	Solenoid Valve Cover, Painted		1		1
39	4748800	Solenoid Backup Valve				

MODEL 60 ZX7000 MULTI-FIT

7,000 pound capacity, max. GVWR, 700 pound tongue load.
GVWR limited to ball rating.



Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
N/A	43397007K	Drum	Std	20	36	2336100042	4395100	4045400	3" Tongue
N/A	47457007K	Disc	Std	20	36	4714200042	4820000	4045400	3" Tongue
N/A	47457107K	Disc	Std	20	30	4714200042	4820000	4045400	3" Tongue
N/A	47457207K	Disc	Std	20	30	4714200042	4820000	4045400	3" Tongue

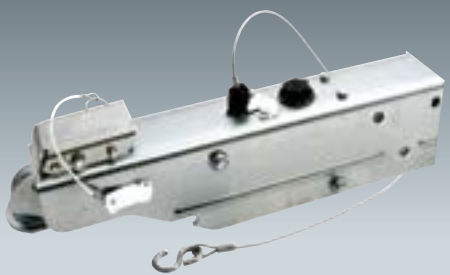
MODEL 60 ZX7000 ACTUATOR PARTS LIST

Ref No.	Part No.	Description	Multi-Fit Plated	Multi-Fit Painted	Leverlock Plated	Leverlock Painted
1	4324600	Outer Case	1		1	
1	4338700	Outer Case		1		1
2	2337700	Strut	1	1	1	1
3	2337800	Coupler Case	1			
3	4097000	Coupler Case		1		
3	4332500	Coupler Case			1	
3	4338800	Coupler Case				1
4	2336200	Shock Absorber	1	1	1	1
5	2339000	Bolt, Hex 7/16" NF x 2-5/8"	1	1	1	1
6	2339100	Locknut, Hex 7/16" NF Thin	1	1	1	1
7	2327800	Roller	4	4	4	4
8	4861300	Bolt, Hex 1/2" NF x 3-3/4" (Grade 8)	2	2	2	2
9	4861400	Locknut, Hex 1/2" NF	2	2	3	3
10	4623800	Breakaway Assy. with Pin, Cover, S-Hook	1	1	1	1
11	1055500	S-Hook - Included with 4623800	1	1	1	1
13	4005200	Breakaway Spring	1	1	1	1
14	2346300	Push Rod Assembly	1	1	1	1
15	2336100042	Master Cylinder - Drum Brake	1	1	1	1
15	4714200042	Master Cylinder - Disc Brake	1	1	1	1
16	2341400	Gasket	1	1	1	1
17	1209800	Connector, 1/64" Orifice - Drum Brake	1	1	1	1
17	4750300	Connector - Disc Brake	1	1	1	1
18	1050800	Bolt, Hex 1/4" NC x 3/4"	4	4	4	4
19	0794000	Lock Washer 1/4"	4	4	4	4
20	4480701	Filler Cap, Diaphragm Type	1	1	1	1
22	2356600	Cover, Master Cylinder	1	1	1	1
23	2338100	Latch Bolt	1	1		
24	1809000	Lock Plate	1	1	1	1
25	4335800	Ball Latch	1	1	1	1
26	4336800	Spring	1	1	1	1
27	2338300	Hand Wheel Lock	1	1		
28	2420000	Hand Wheel	1	1		
29	2496400	Lock Ring	1	1		
30	2452500183	Cover, Front, Plated	2		2	
30	2452500317	Cover, Front, Painted		2		2
31	4861200	Screw, Cover	6	6	6	6
32	4358500	Handle Assembly			1	1
33	4334500	Spring Plate			1	1
34	4045400	Multi-fit Coupler Repair Kit	1	1		
35	4358400	Leverlock Coupler Repair Kit			1	1
36	1502600	Master Cylinder Repair Kit Wagner	1	1	1	1
37	4395100	Master Cylinder Kit, Drum Brakes	1	1	1	1
37	4820000	Master Cylinder Kit, Disc Brakes	1	1	1	1
38	4835800183	Solenoid Valve Cover, Plated	1		1	
38	4835800	Solenoid Valve Cover, Painted		1		1
39	4748800	Solenoid Backup Valve				
40	4360900	Quick Release Pin and Lanyard				

Shaded part #'s ending in "10" have solenoid covers only. Shaded part #'s ending in "20" have solenoids with covers. Unshaded part numbers do not have solenoids or covers.

AERO 7500 WITH LOCKOUT LEVER

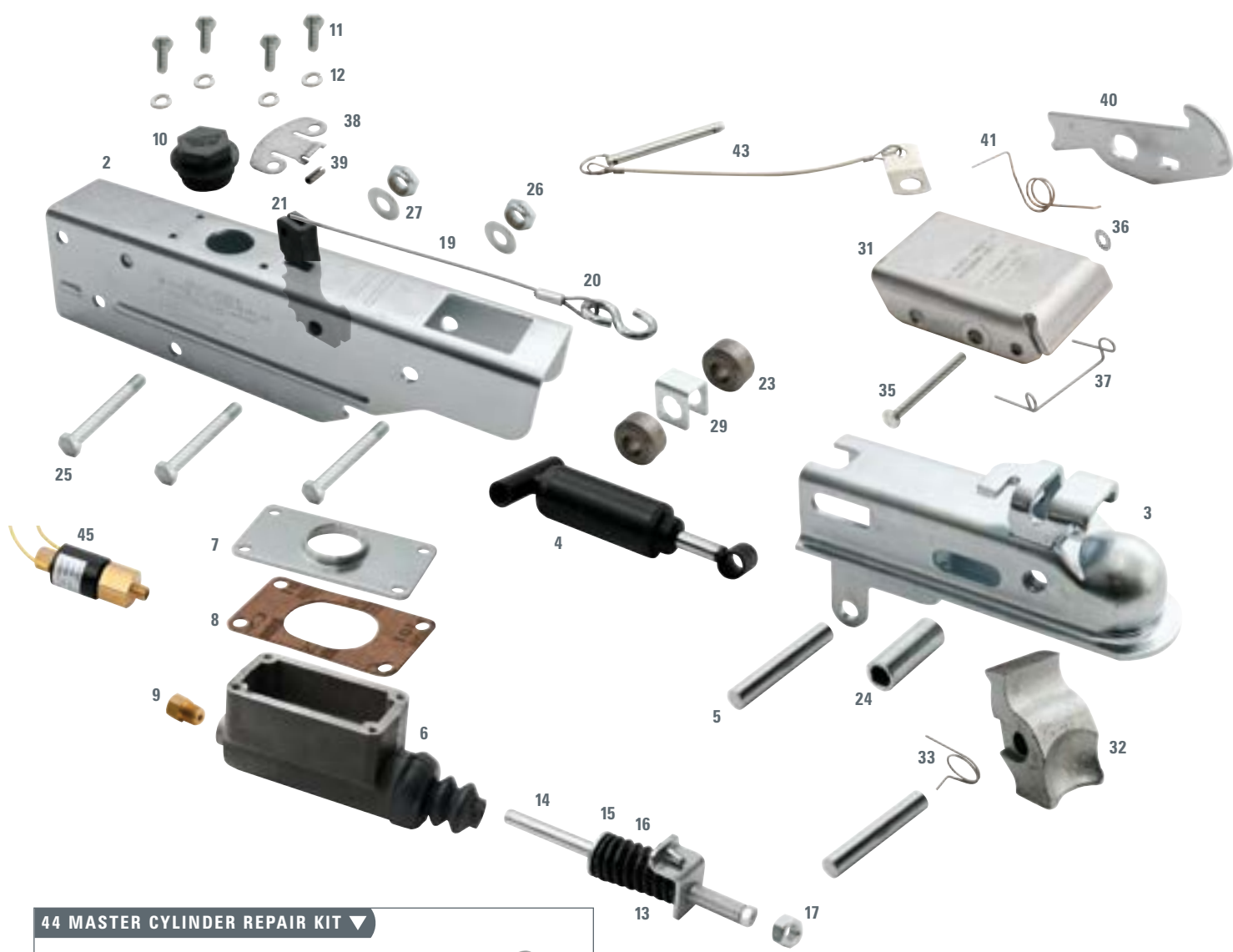
7,500 pound capacity, max. GVWR, 750 pound tongue load.
GVWR limited to ball rating.



Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
N/A	4500600	Drum	Std	24	36	2336100042	4875800	3" Tongue
N/A	4606500	Disc	Std	20	36	4714200042	4875700	3" Tongue
N/A	4606520	Disc	Std	20	36	4714200042	4875700	3" Tongue

NOTE: Use only with 2" diameter tow ball. GVWR limited to that of the ball and hitch being used.

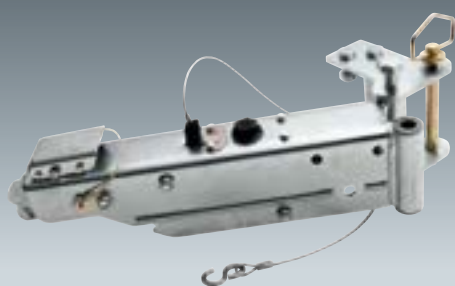
AERO 7500 ACTUATOR DIAGRAM ▼



44 MASTER CYLINDER REPAIR KIT ▼



AERO 7500 SWINGAWAY



7,500 pound capacity, max. GVWR, 750 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
N/A	4839000	Drum	Std	38	20	2336100042	4875800	Coupler Bolt-On
N/A	4839100	Disc	Std	38	20	4714200042	4875700	Coupler Bolt-On

AERO 7500 SWINGAWAY PRODUCT LIST

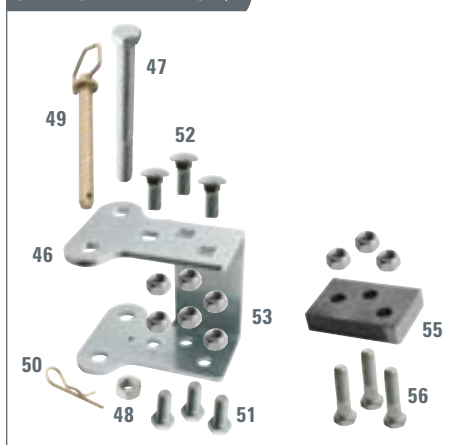
Ref No.	Part No.	Description	Quantity
46	4838600	Swing Arm Bracket	1
47	4839500	Bolt 3/4-10" UNC x 7"	1
48	4839600	Locknut 3/4-10" UNC	1
49	4839700	Hitch Pin 3/4" x 6.25"	1
50	4840700	Spring Pin	1
51	4839800	Bolt 5/8-11" UNC x 1.5" (round)	3
52	4840200	Bolt 5/8-11" UNC x 1.5" (hex)	3
53	4839900	Locknut 5/8-11" UNC	6
2	4838900	A7500 Outer Case Swingaway	1
55	4842100	1" Inch Adapter (use on 4" tall tongue)	1
56	4842000	Bolt	3

AERO 7500 ACTUATOR PARTS LIST

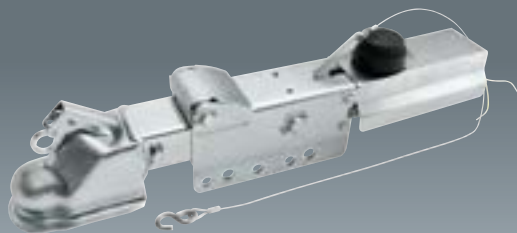
Ref No.	Part No.	Description	Quantity
2	4500700	Outer Case, Plated	1
3	4518100183	Coupler Case Assembly, Plated	1
4	4502000	Damper	1
5	4511400	1/2" Damper Pin/Ball Latch Pin, Hardened	2
6A	2336100042	Master Cylinder, Drum Brake, 1.25" Bore	1
6B	4714200042	Master Cylinder, Disc Brake, 1.25" Bore	1
7	4518200	Cover, Master Cylinder	1
8	4524400	Gasket, Master Cylinder	1
9A	1209800	Orifice Connector, .015", Drum Brake	1
9B	4750300	Orifice Connector, .125", Disc Brake	1
10	4480701	Filler Cap with Diaphragm	1
11	4624200	Bolt, 1/4" x .875" 20 NC	4
12	0794000	Lockwasher, 1/4" Standard	4
13	4502700	Pushrod and Breakaway Cable Assembly	1
* 14	2338400	Push Rod	1
* 15	2338500	Washer, Push Rod	1
* 16	2338600	Spring	1
* 17	1740600	Lock Nut, 5/16" - 18NC	2
* 18	4518300	Spring Guide	1
* 19	4501300	Breakaway Cable	1
* 20	1055500	S - Hook	1
21	4597100	Breakaway Lever	1
22	4599500	Roll Pin, 3/16" x 1/2"	1
23	4518400	Rear Roller, Sintered Iron	2
24	4518500	Front Roller, Steel Tubing	1
25	2341300	Bolt, 1/2" x 3 3/4" NF, Grade 5	3
26	4835400	1/2" - 20 NF Jam Nut	3
27	4511200	Washer, 1/2"	2
29	4524900	Roller Separator	1
31	4501100	Handle	1
32	4500900	Ball Latch, Cast	1
33	4520000	Spring, Ball Latch	1
34	4811500	Bolt, 5/16" x 3" Grade 8 NC	1
35	4518600	Groove Pin, 1/4"	1
36	4518700	Retaining Ring, 1/4"	1
37	4521500	Spring, Handle	1
38	4501400	Breakaway Catch Spring	1
39	4597200	Breakaway Catch Pin	1
40	4600100183	Lockout Lever	1
41	4600000	Lockout Torsion Spring	1
42	4745500	Label, Disc Brake Actuator	1
43	4706400	Quick Release Pin and Lanyard	1
44	1502600	Master Cylinder Repair Kit	1
45	4748800	Solenoid Back Up Valve	1

Note: * = all parts of 13 - Pushrod and Breakaway Cable Assembly

SWINGAWAY KITS ▼



MODEL 6 WITH 2-5/16" BALL COUPLER

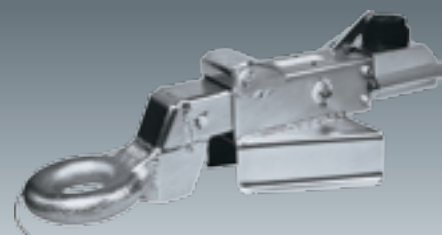


8,000 pound capacity, max. GVWR, 800 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
N/A	4079200	Drum	Std	35	22	1027100	1777401	1848700	2-5/16" Coupler Bolt-On
N/A	4747200	Disc	Std	35	22	4747000	1777405	1848700	2-5/16" Coupler Bolt-On
4079200317	N/A	Drum	Non	35	22	1027100	1777401	1848700	2-5/16" Coupler Bolt-On
4747200317	N/A	Disc	Non	35	22	4747000	1777405	1848700	2-5/16" Coupler Bolt-On
N/A	4079220	Drum	Std	35	20	1027100	1777401	1848700	2-5/16" Coupler Bolt-On
N/A	4747210	Disc	Std	35	20	4747000	1777405	1848700	2-5/16" Coupler Bolt-On
N/A	4747220	Disc	Std	35	20	4747000	1777405	1848700	2-5/16" Coupler Bolt-On

For 3" wide trailer tongue. Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 6 A-FRAME WITH LUNETTE EYE

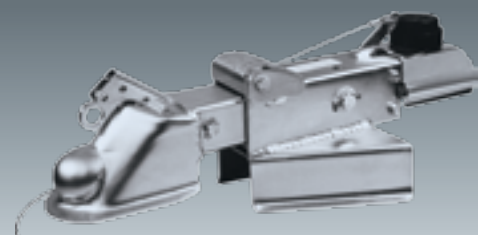


7,500 pound capacity, max. GVWR, 750 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
N/A	4045500	Drum	Std	41	14	1027100	1777401	Lunette Eye Weld-On

Disc brake version is available upon request.

MODEL 6 A-FRAME WITH 2-5/16" BALL COUPLER



7,500 pound capacity, max. GVWR, 750 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
N/A	4067600	Drum	Std	38	14	1027100	1777401	1848700	2-5/16" Coupler Weld-On

Disc brake version is available upon request.

MODEL 6 A-FRAME WITH MULTI-FIT BALL COUPLER

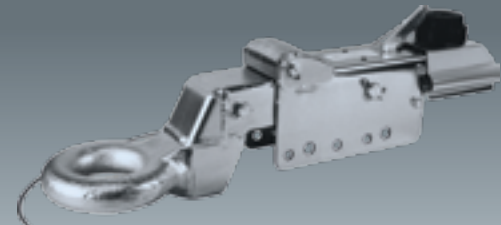


6,000 pound capacity, max. GVWR, 600 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
N/A	2492800	Drum	Std	31	14	1027100	1777401	4045400	Coupler Weld-On

Fits 1-7/8", 50 mm and 2" ball. Disc brake version is available upon request.

MODEL 6 STRAIGHT WITH LUNETTE EYE



8,000 pound capacity, max. GVWR, 800 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
N/A	4093200	Drum	Std	38	20	1027100	1777401	Lunette Eye Bolt-On
N/A	4748000	Disc	Std	38	20	4747000	1777405	Lunette Eye Bolt-On
N/A	4748010	Disc	Std	38	20	4747000	1777405	Lunette Eye Bolt-On
N/A	4748020	Disc	Std	38	20	4747000	1777405	Lunette Eye Bolt-On

For 3" wide trailer tongue. Padlock (Master Lock #30) works with a 2-5/16" ball coupler. Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 6 WITH MULTI-FIT BALL COUPLER

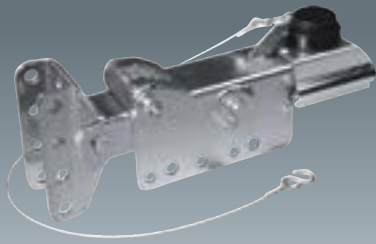


6,000 pound capacity, max. GVWR, 600 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
N/A	2480000	Drum	Std	28	22	1027100	1777401	4045400	Coupler Bolt-On
N/A	4747900	Disc	Std	28	22	4747000	1777405	4045400	Coupler Bolt-On
N/A	4747910	Disc	Std	28	20	4747000	1777405	4045400	Coupler Bolt-On
N/A	4747920	Disc	Std	28	20	4747000	1777405	4045400	Coupler Bolt-On

For 3" wide trailer tongue. Fits 1-7/8", 50 mm and 2" ball.

MODEL 6 WITH LEVELER CHANNEL (4)

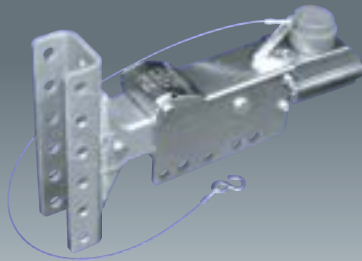


8,000 pound capacity, max. GVWR, 800 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
N/A	4744901	Drum	Std	28	22	1027100	1777401	Coupler Bolt-On
4744900	N/A	Drum	Std	28	22	1027100	1777401	Coupler Bolt-On
4748100	N/A	Disc	Std	28	22	4747000	1777405	Coupler Bolt-On
N/A	4748101	Disc	Std	28	22	4747000	1777405	Coupler Bolt-On

Disc brake version is available upon request. Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 6 WITH LEVELER CHANNEL (6)

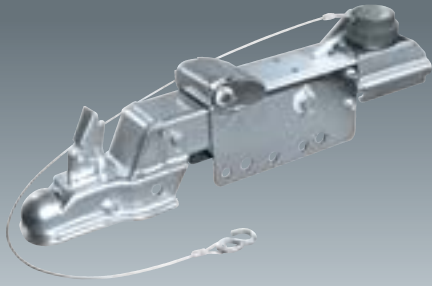


8,000 pound capacity, max. GVWR, 800 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
N/A	4846600	Drum	Non	32	14	1027100	1777401	Centered
N/A	4846700	Disc	Non	32	14	4747000	1777405	Centered
N/A	4846720	Disc	Non	32	14	4747000	1777405	Centered

Disc brake version is available upon request. Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 6 WITH 2" LEVERLOCK COUPLER

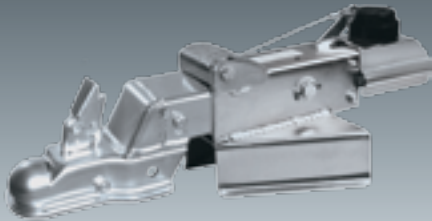


7,000 pound capacity, max. GVWR, 700 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
N/A	4845300	Drum	Non	27	22	1027100	1777401	4358400	2" Leverlock Coupler
N/A	4845400	Disc	Non	27	22	4747000	1777405	4358400	2" Leverlock Coupler

For 3" wide trailer tongue. Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 6 A-FRAME WITH 2" LEVERLOCK COUPLER



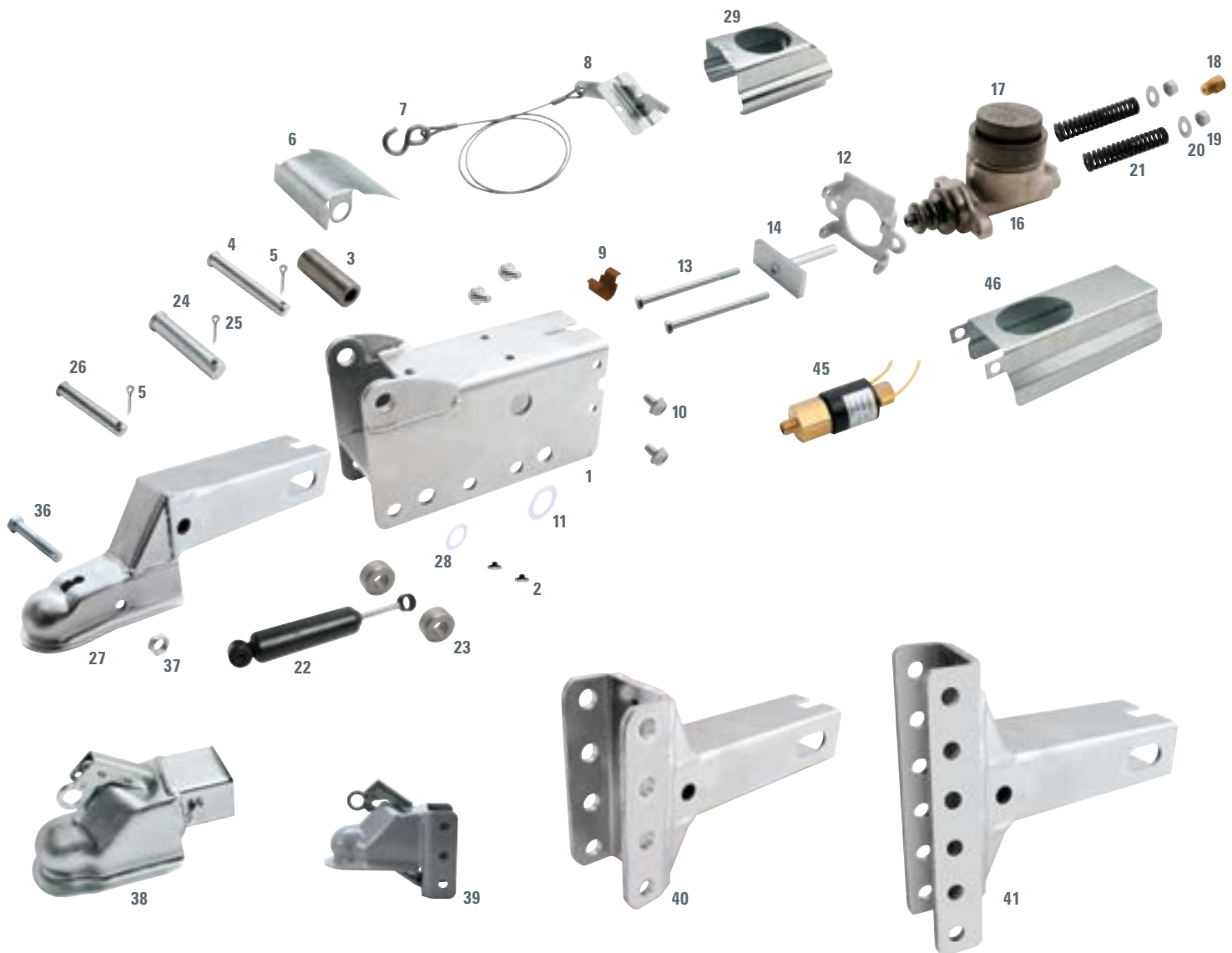
7,000 pound capacity, max. GVWR, 700 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
N/A	4845500	Drum	Non	27	22	1027100	1777401	4358400	A-Frame 2" Leverlock

For 3" wide trailer tongue. Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 6

MODEL 6 ACTUATOR DIAGRAM ▼



42 MASTER CYLINDER REPAIR KIT ▼



43 MULTI-FIT PARTS ▼



44 COUPLER REPAIR KIT ▼



MODEL 6

MODEL 6 ACTUATOR PRODUCT LIST

Part No. Drum	Part No. Disc	Description	Inner	Outer
4079200		2-5/16" Coupler	4067700183	2480100183
	4747200	2-5/16" Coupler	4067700183	2480100183
	4747210	2-5/16" Coupler with Cover	4067700183	2480100183
4079220	4747220	2-5/16" Coupler with Valve and Cover	4067700183	2480100183
4079200317		2-5/16" Coupler, Painted	4067700317	2480100317
4067600		2-5/16" Coupler, A-Frame	4067700183	2493000
4093200		3" Lunette Eye	4045600183	2480100183
	4748000	3" Lunette Eye	4045600183	2480100183
4045500		3" Lunette Eye, A-Frame	4045600183	2493000
2492800		2" Multi-Fit Coupler, A-Frame	4391600	2493000
4022300		Multi-Fit Coupler, Reduced Height Outer	4391600	2493201
4845300		2" Leverlock Coupler	4845200	2480100183
	4845400	2" Leverlock Coupler	4845200	2480100183
4845500		A-Frame Leverlock 2" Coupler	4845200	2493000
4858400		A-Frame with 4-Hole Leveler Channel	4745100183	2493000
4057900		A-Frame, Less Coupler	1776900	2493000
4744900		4-Hole Leveler Channel, Painted	4745100317	4717600317
	4748100	4-Hole Leveler Channel, Painted	4745100317	4717600317
4744901		4-Hole Leveler Channel	4745100183	4717600183
	4748101	4-Hole Leveler Channel	4745100183	4717600183
4846600183	4846700183	6-Hole Offset Leveler Channel	4846500183	4717600183
	4846720183	6-Hole Offset Leveler Channel with Valve and Cover	4846500183	4717600183
1777401		Master Cylinder with Mounting Brackets		
	1777405	Master Cylinder with Mounting Brackets		

MODEL 6 ACTUATOR PARTS LIST

Ref No.	Part No.	Description	Quantity	Ref No.	Part No.	Description	Quantity
1A	2480100183	Outer Case, Plated	1	22	1242600	Damper	1
1B	2493000	A-Frame Outer Case, 50 degree angle	1	23	0829100	Rear Roller	2
2	1242700	Bearing, .075"	2	24	1777300	Master Pin	1
3	1776300	Front Roller	1	25	0815200	Cotter Pin, 3/16" x 1-1/4"	1
4	1776600	Pin, Front Roller	1	26	1777200	Damper Pin	1
5	0799700	Cotter Pin 1/8" x 3/4"	2	27	4391600	Inner Slide with 2" Ball Latch, Bolt and Locknut	1
6A	1776700183	Front Roller Cover, 6000# rating	1	28	1831600	Washer	1
6B	4350700183	Front Roller Cover, 7500# rating	1	29	1806600183	Cover	1
6C	4655900183	Front Roller Cover, 8000# rating	1	30	2338100	Latch Bolt, Multi-fit Coupler	1
7	4594100	Breakaway Lever with Pin	1	31	1809000	Lock Plate	1
8	1055500	S-Hook - included with 4594100	1	32	4335800	Ball Latch, 2"	1
9	1780300	Breakaway Spring	1	33	4336800	Compression Spring	1
10	1781500	Hex Bolt 5/16" x 1/2", Self Tapping, Grade 5	4	34	2338300	Hand Wheel Lock	1
11	1861900	Flat Washer, Nylon	1	35	2420000	Hand Wheel Lock	1
12	1776200	Mounting Plate, Master Cylinder	1	36	2339000	Hex Bolt, 7/16" x 2-5/8" NF, Grade 8	1
13	1027300	Hex Bolt 5/16" x 5", NC Grade 5	2	37	2339100	Locknut, 7/16" Thin	1
14	4390500	Push Rod Assembly	1	38	4045600183	Inner Slide with 3" Lunette Eye, Plated	1
15	2496400	Lock Ring	1	39	4067700183	Inner Slide with 2-5/16" Coupler, Plated	1
16A	1027100	Master Cylinder, Drum Brake	1	40	4745100183	4-Hole Inner Slide	1
16B	4747000	Master Cylinder, Disc Brake	1	41	4846500183	6-Hole Inner Slide	1
17	1755600	Filler Cap, Master Cylinder, Diaphragm Type	1	42	1502600	1" Bore Master Cylinder Repair Kit	1
18A	1209800	Orifice Connector, .015" dia for Drum Brakes	1	43	4045400	2" Multi-fit Coupler Repair Kit	1
18B	4750300	Orifice Connector, .125" dia for Disc Brakes	1	44	1848700	2-5/16" Coupler Repair Kit	1
19	0797600	Nut, 3/8" NC	2	45	4748800	Solenoid Backup Valve	1
20	0782000	Flat Washer, 3/8"	2	46	4836800183	Solenoid Backup Valve Cover, Plated	1
21	1027400	Spring	2				

MODEL 10 2-5/16" DROP COUPLER WITH MOUNTING CHANNEL



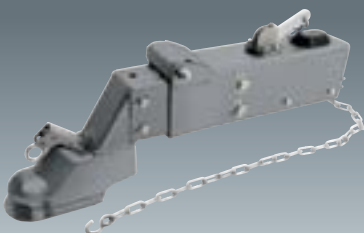
12,500 pound capacity, max. GVWR, 1,250 pound tongue capacity.
GVWR limited to ball rating.

The Model 10 is demountable when installed with mounting channel for 3" width tongue or may be welded for permanent installation. This actuator is available with ball couplers, 3" lunette eye, and adjustable clevis hitch. Usage suggested for recreational and light industrial trailers towed by passenger cars and light trucks. ZINC PLATED (MARINE) MODELS PROVIDE GREATER CORROSION RESISTANCE.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1772700	N/A	Drum	Std	56	15	2374400	2374600	1848700	2-5/16" Coupler Bolt-On
N/A	2478100	Drum	Std	57	15	2374400	2374600	1848700	2-5/16" Coupler Bolt-On
N/A	4750600	Disc	Std	57	15	4747100	4749501042	1848700	2-5/16" Coupler Bolt-On
N/A	4750610	Disc	Std	57	12	4747100	4749501042	1848700	2-5/16" Coupler Bolt-On
N/A	4750620	Disc	Std	57	12	4747100	4749501042	1848700	2-5/16" Coupler Bolt-On
N/A	4299600	Drum	Non	56	12	2374400	2374600	1848700	2-5/16" Coupler, 2-1/2" Offset

Padlock (Master Lock #30) works with a 2-5/16" ball coupler.

MODEL 10 2-5/16" DROP COUPLER LESS MOUNTING CHANNEL

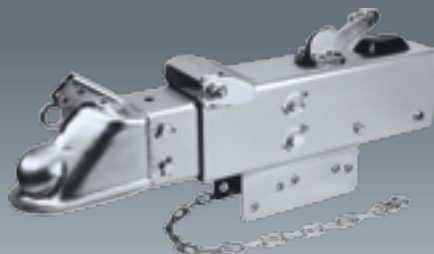


12,500 pound capacity, max. GVWR, 1,250 pound tongue capacity.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1735200	N/A	Drum	Std	53	15	2374400	2374600	1848700	2-5/16" Coupler Weld-On
4830300	N/A	Disc	Std	53	15	4747100	4749501042	1848700	2-5/16" Coupler Weld-On

Disc Brake version available upon request

MODEL 10 STRAIGHT WITH 2-5/16" COUPLER AND MOUNTING CHANNEL



12,500 pound capacity, max. GVWR, 1,250 pound tongue capacity.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1664300	N/A	Drum	Non	54	15	2374400	2374600	1848700	2-5/16" Coupler Bolt-On
N/A	2477600	Drum	Std	54	15	2374400	2374600	1848700	2-5/16" Coupler Bolt-On
N/A	4750800	Disc	Std	54	15	4747100	4749501042	1848700	2-5/16" Coupler Bolt-On
N/A	4750810	Disc	Std	54	12	4747100	4749501042	1848700	2-5/16" Coupler Bolt-On
N/A	4750820	Disc	Std	54	12	4747100	4749501042	1848700	2-5/16" Coupler Bolt-On

Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 10 STRAIGHT WITH 2-5/16" COUPLER LESS MOUNTING CHANNEL



12,500 pound capacity, max. GVWR, 1,250 pound tongue capacity.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1607500	N/A	Drum	Std	50	18	2374400	2374600	1848700	2-5/16" Coupler Weld-On
4749600	N/A	Disc	Std	50	18	4747100	4749501042	1848700	2-5/16" Coupler Weld-On
4749610	N/A	Disc	Std	50	12	4747100	4749501042	1848700	2-5/16" Coupler Weld-On
4749620	N/A	Disc	Std	50	12	4747100	4749501042	1848700	2-5/16" Coupler Weld-On

MODEL 10 WITH LEVELER CHANNEL (4) AND MOUNTING CHANNEL



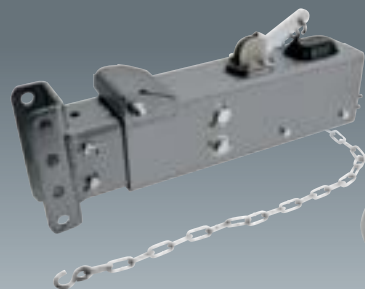
12,500 pound capacity, max. GVWR, 1,250 pound tongue capacity.
GVWR limited to ball rating.



Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
4238300	N/A	Drum	Non	60	15	2374400	2374600	1848700	2-5/16" Coupler
4238500	4809800	Drum	Non	61	15	2374400	2374600	N/A	With Lunette Eye
2324800	4721600	Drum	Non	48	15	2374400	2374600	N/A	2-1/2" Offset Mounting Channel
N/A	4809700	Drum	Non	49	15	2374400	2374600	N/A	Leveler
N/A	4809900	Disc	Non	49	15	4747100	4749501042	N/A	Act with Leveler
N/A	4809910	Disc	Non	49	12	4747100	4749501042	N/A	Act with Leveler
N/A	4809920	Disc	Non	49	12	4747100	4749501042	N/A	Act with Leveler
N/A	4810000	Disc	Non	61	15	4747100	4749501042	N/A	With Lunette Eye
N/A	4810010	Disc	Non	61	12	4747100	4749501042	N/A	With Lunette Eye
N/A	4810020	Disc	Non	61	12	4747100	4749501042	N/A	With Lunette Eye
4836700	N/A	Drum	Non	47	12	2374400	2374600	N/A	1" Offset Mounting Channel

For 3" wide trailer tongue. Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 10 WITH LEVELER CHANNEL (4) LESS MOUNTING CHANNEL



12,500 pound capacity, max. GVWR, 1,250 pound tongue capacity.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
2404600	N/A	Drum	Std	45	15	2374400	2374600	N/A	Leveler Channel Only
4838000	N/A	Disc	Std	45	15	4747100	4749501042	N/A	Leveler Channel Only
1607900	N/A	Drum	Std	54	15	2374400	2374600	N/A	8979 Clevis Hitch
1890900	N/A	Drum	Std	57	15	2374400	2374600	1848700	18820 2-5/16" Coupler
1891100	N/A	Drum	Std	57	15	2374400	2374600	N/A	16317 Lunette Eye

For 3" wide trailer tongue. Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 10 CENTERED LEVELER CHANNEL (6) AND MOUNTING CHANNEL



12,500 pound capacity, max. GVWR, 1,250 pound tongue capacity.
GVWR limited to ball rating.

CENTERED

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
INNER: 4867800317 (PAINTED)								
4867500	N/A	Drum	Std	48	12	2374400	2374600	Bolt-On
4867510	N/A	Drum	Std	53	12	2374400	2374600	Bolt-On, Solenoid Cover Only
4867520	N/A	Drum	Std	52	12	2374400	2374600	Bolt-On, Solenoid and Cover
N/A	4867400	Drum	Std	53	12	2374400	2374600	Bolt-On, Solenoid and Cover
N/A	4867410	Drum	Std	52	12	2374400	2374600	Bolt-On, Solenoid Cover Only
N/A	4867420	Drum	Std	53	12	2374400	2374600	Bolt-On, Solenoid and Cover
INNER: 4867800183 (PLATED)								
4873200*	N/A	Drum	Std	48	12	2374400	2374600	Weld-On, Lunette Eye
4873300*	N/A	Disc	Std	53	12	4747100	4749501042	Weld-On, Lunette Eye
4873310*	N/A	Disc	Std	52	12	4747100	4749501042	Weld-On, Lunette Eye, Solenoid Cover Only
4873320*	N/A	Disc	Std	53	12	4747100	4749501042	Weld-On, Lunette Eye, Solenoid and Cover
4873400*	N/A	Drum	Std	52	12	2374400	2374600	Weld-On
4873500*	N/A	Disc	Std	53	12	4747100	4749501042	Weld-On
4873510*	N/A	Disc	Std	52	12	4747100	4749501042	Weld-On, Solenoid Cover Only
4873520*	N/A	Disc	Std	53	12	4747100	4749501042	Weld-On, Solenoid and Cover

For 3" wide trailer tongue. Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required. *Not shown in the image above.

MODEL 10

OFFSET LEVELER CHANNEL (6) LESS MOUNTING CHANNEL

MODEL 10

12,500 pound capacity, max. GVWR, 1,250 pound tongue capacity.
GVWR limited to ball rating.

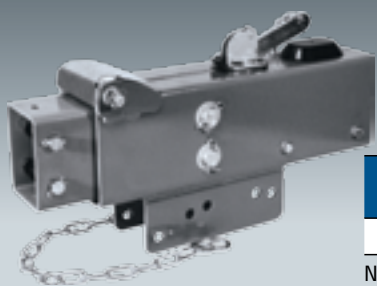


OFFSET

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
INNER: 4848700317 (PAINTED)								
4848800	N/A	Disc	Std	48	12	4747100	4749501042	Weld-On, Lunette Eye
4848900	N/A	Drum	Std	53	12	2374400	2374600	Weld-On, Lunette Eye
4850600	N/A	Drum	Std	52	12	2374400	2374600	With Weld Plate
4857420	N/A	Disc	Std	53	12	4747100	4749501042	Weld-On, Solenoid and Cover
4857520	N/A	Drum	Std	52	12	2374400	2374600	Weld-On, Solenoid Cover Only
4866500	N/A	Drum	Std	53	12	2374400	2374600	Weld-On
INNER: 4848700183 (PLATED)								
N/A	4857020*	Disc	Std	48	12	4747100	4749501042	Bolt-On, Solenoid and Cover
N/A	4857200*	Drum	Std	53	12	2374400	2374600	Bolt-On
N/A	4857220*	Drum	Std	52	12	2374400	2374600	Bolt-On, Solenoid and Cover
N/A	4857120*	Disc	Std	53	12	4747100	4749501042	Bolt-On, Solenoid and Cover
N/A	4857320*	Drum	Std	52	12	2374400	2374600	Bolt-On, Solenoid and Cover

For 3" wide trailer tongue. Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required. *Not shown in the image above.

MODEL 10 STRAIGHT LESS COUPLER WITH MOUNTING CHANNEL

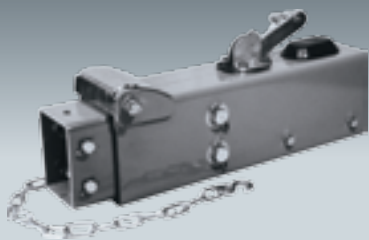


12,500 pound capacity, max. GVWR, 1,250 pound tongue capacity.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
1664900	N/A	Drum	Non	45	15	2374400	2374600	Bolt-On

Non-standard actuators require minimum 8-week lead time and minimum quantity may be required.

MODEL 10 STRAIGHT LESS COUPLER LESS MOUNTING CHANNEL

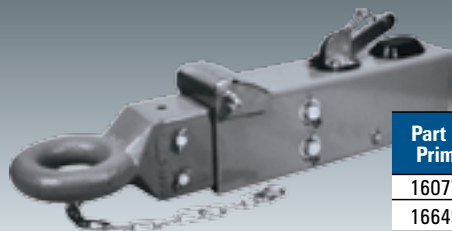


12,500 pound capacity, max. GVWR, 1,250 pound tongue capacity.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
1608000	N/A	Drum	Std	41	30	23474400	2374600	Weld-On

Disc brake version available upon request.

MODEL 10 STRAIGHT WITH LUNETTE EYE



12,500 pound capacity

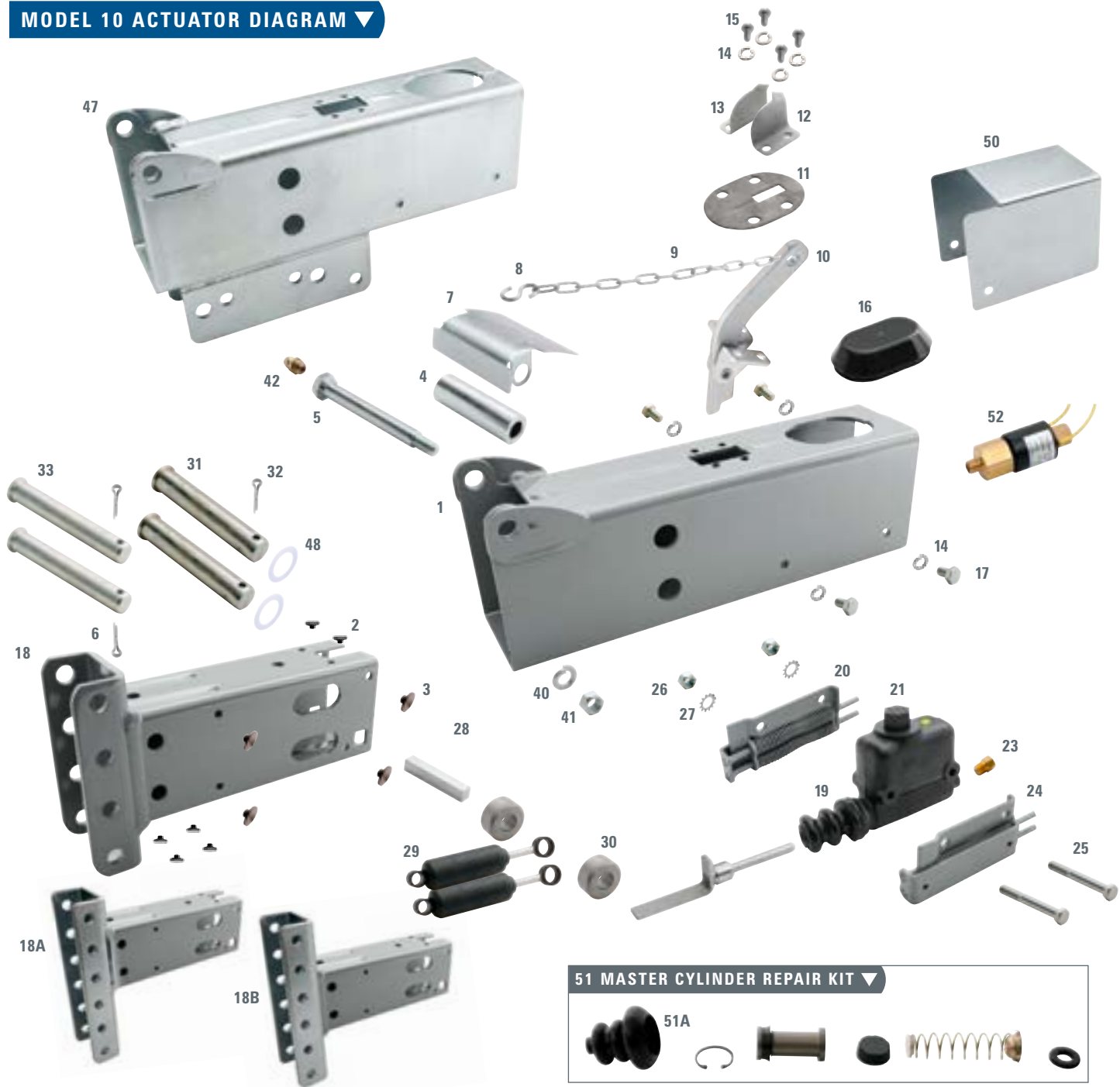
Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
1607700	N/A	Drum	Non	54	18	2374400	2374600	Lunette Eye Weld-On
1664500	N/A	Drum	Non	58	15	2374400	2374600	Lunette Eye Bolt-On

With mounting channel for 3" width tongue. Non-standard actuators require minimum 8-week lead time and minimum quantity may be required. Disc brake version available upon request.

NOTES

MODEL 10

MODEL 10 ACTUATOR DIAGRAM ▼



51 MASTER CYLINDER REPAIR KIT ▼



MODEL 10 ACTUATOR PRODUCT LIST

Part No. Drum	Part No. Disc	Description	Attachment	Inner	Outer
1608000		No Coupler, Painted	Weld-On	1593300	1601600
1664900		No Coupler, 2.5" Offset Mounting Channel	Bolt-On 1/2"	1593300	2477700317
2404600	4838000	4-Hole Leveler Channel, Painted	Weld-On	1608700317	1601600
4836700		4-Hole Leveler Channel, 1" Offset Mounting Channel, Painted	Bolt-On 5/8"	1608700317	1685500
4809700	4809900	4-Hole Leveler Channel, Plated	Bolt-On 5/8"	4721700	2478200
4809800	4810000	4-Hole Leveler Channel with Lunette Eye	Bolt-On 5/8"	4721700	2478200
	4810020	4-Hole Leveler Channel with Lunette Eye Valve and Cover	Bolt-On 5/8"	4721700	2478200
4721600		4-Hole Leveler Channel, 2.5" Offset, Plated	Bolt-On 1/2"	4721700	2477700183
2324800		4-Hole Leveler Channel, 2.5" Offset, Painted	Bolt-On 1/2"	1608700317	2477700317

MODEL 10

Part No. Drum	Part No. Disc	Description	Attachment	Inner	Outer
1607500	4749600	2-5/16" Coupler, Straight, Painted	Weld-On	1608400317	1601600
	4749610	2-5/16" Coupler, with Cover	Weld-On	1608400317	1601600
	4749620	2-5/16" Coupler, with Solenoid Valve and Cover	Weld-On	1608400317	1601600
1664300		2-5/16" Coupler, 2.5" Offset, Painted	Bolt-On 1/2"	1608400317	2477700317
2477600	4750800	2-5/16" Coupler, 2.5" Offset, Plated	Bolt-On 1/2"	1608400183	2477700183
	4750810	2-5/16" Coupler, 2.5" Offset, Plated, Cover	Bolt-On 1/2"	1608400183	2477700183
	4850820	2-5/16" Coupler, 2.5" Offset, Valve and Cover	Bolt-On 1/2"	1608400183	2477700183
1735200	4830300	2-5/16" Drop Coupler, Painted	Weld-On	2478300317	1601600
	4837900	2-5/16" Drop Coupler with Valve and Cover	Weld-On	2478300317	1601600
1772700	4830100	2-5/16" Drop Coupler, 1" Offset Mounting Channel	Bolt-On 5/8"	2478300317	1685500
2478100	4750600	2-5/16" Drop Coupler, Plated	Bolt-On 5/8"	2478300183	2478200
	4750610	2-5/16" Drop Coupler, Plated, with Cover	Bolt-On 5/8"	2478300183	2478200
	4750620	2-5/16" Drop Coupler, Pld, with Solenoid Valve and Cover	Bolt-On 5/8"	2478300183	2478200
4299600		2-5/16" Drop Coupler, 2.5" Offset Mounting Channel	Bolt-On 1/2"	2478300183	2477700183
1890900		4-Hole Leveler Channel with 2-5/16" Coupler	Weld-On	1608700317	1601600
4238300		4-Hole Leveler Channel with 2-5/16" Coupler	Bolt-On 5/8"	1608700317	1685500
1607900		4-Hole Leveler Channel with 2 Bolt Clevis Hitch	Weld-On	1608700317	1601600
1891100		4-Hole Leveler Channel with Lunette Eye and Bolts	Weld-On	1608700317	1601600
4238500		4-Hole Leveler Channel with Lunette Eye and Bolts	Bolt-On 5/8"	1608700317	1685500
1607700		3" Lunette Eye, Painted	Weld-On	1608600	1601600
1664500		3" Lunette Eye, 2.5" Offset Mounting Channel	Bolt-On 1/2"	1608600	2477700317
4848900	4848800	6-Hole Offset, with Lunette Eye and Bolts	Weld-On	4848700317	1601600
4850600		6-Hole Offset, Flat Mounting Plate	Weld-On	4848700317	4850500317
4857200		6-Hole Offset	Bolt-On 5/8"	4848700183	2478200
4857220	4857020	6-Hole Offset, with Solenoid Valve and Cover	Bolt-On 5/8"	4848700183	2478200
4857320	4857120	6-Hole Offset, Painted, with Solenoid Valve and Cover	Bolt-On 5/8"	4848700317	1685500
4857520	4857420	6-Hole Offset, with Solenoid Valve and Cover	Weld-On	4848700317	1601600
4867500		6-Hole Centered	Bolt-On 5/8"	4867800317	1685500
4867510		6-Hole Centered with Solenoid Valve	Bolt-On 5/8"	4867800317	1685500
4867520		6-Hole Centered with Solenoid Valve and Cover	Bolt-On 5/8"	4867800317	1685500
	4867400	6-Hole Centered	Bolt-On 5/8"	4867800183	2478200
	4867410	6-Hole Centered with Cover	Bolt-On 5/8"	4867800183	2478200
	4867420	6-Hole Centered with Solenoid Valve	Bolt-On 5/8"	4867800183	2478200
4866500		6-Hole Centered with Solenoid Valve and Cover	Bolt-On 5/8"	4867800183	2478200

MODEL 10 ACTUATOR PARTS LIST

Ref No.	Part No.	Description	Quantity
1	1601600	Outer Case, Painted	1
2	1020900	Bearing (Top and Bottom) .125" Thick	6
3	1242700	Bearing (Side) .075" Thick	8
4	1601900	Front Roller	1
5	0828800	Front Roller Bolt	1
6	0799700	Cotter Pin 1/8" x 1"	2
7	1601800	Front Roller Cover	1
8	0776800	Breakaway Chain	1
9	1055500	S-Hook	2
10	1054100	Breakaway Lever Assembly	1
11	1055200	Weather Seal	1
12	1052600	Breakaway Lock - Left Hand	1
13	1052700	Breakaway Lock - Right Hand	1
14	0793800	Lockwasher, 5/16" Standard	8
15	0794900	Hex Bolt 5/16" - 18 NC x 5/8" Long	4
16	1507000	Cylinder Cover	1
17	0794800	Hex Bolt 5/16" - 18 NC x 1/2" Long	4
18	1608700317	Inner Slide, 4-Hole Leveler	1
18A	4848700183	Inner Slide, 6-Hole Leveler, Offset	1
18B	4867800317	Inner Slide, 6-Hole Leveler, Centered	1
19A	2374400	Master Cylinder, 1-1/4" Bore, Drum Brake	1
*	4831600	Master Cylinder, Drum Brake with 1209800, Orifice	1
19B	4747100	Master Cylinder, 1-1/4" Bore, Disc Brake	1
20	0838800	Cylinder Bracket, Right Hand	1
21	4830601	Filler Cap with Diaphragm	1
23	1209800	Orifice Connector, Drum, .015", 1/8" NPT	1

Ref No.	Part No.	Description	Quantity
*	1209900	Orifice, Drum, Early Type, 1/2" NF Thread	1
*	0774500	Gasket, For Use with Earlier 1209900 Orifice	1
24	0838900	Cylinder Bracket, Left Hand	1
25	0827100	Hex Bolt, 3/8" - 16 NC x 3" Long	2
26	0797600	Hex Nut 3/8" NC	2
27	1255200	Star Lockwasher 3/8"	2
28	0830100	Push Rod Block	1
29	1242600	Damper	2
30	0829100	Rear Roller	2
31	1593500	Master Pin	2
32	0815200	Cotter Pin 3/16" x 1-1/4"	2
33	1593400	Damper Pin	2
40	0793700	Lockwasher, 1/2" Standard	1
41	0798500	Hex Nut 1/2" - 13 NC	1
42	0144901	Grease Zerk	1
47A	2478200	Outer Case, 1" Offset Mounting Channel, Plated	1
47B	1685500	Outer Case, 1" Offset Mounting Channel Painted	1
48	1861900	Nylon Flat Washer	2
*	2374600	Drum Brake Master Cylinder Assy with Brackets	1
*	4749501042	Disc Brake Master Cylinder Assy with Brackets	1
50A	4836100183	Backup Valve Cover, Plated	1
50B	4836100	Backup Valve Cover, Painted	1
51	1018700	1-1/4" Master Cylinder Repair Kit for 2374400	1
51A	4359100	Master Cylinder Boot	1
52	4748800	Solenoid Backup Valve, Male 1/8" NPT and 3/8" x 24 NF with Inverted Seat	1

Note: * = not shown in diagram

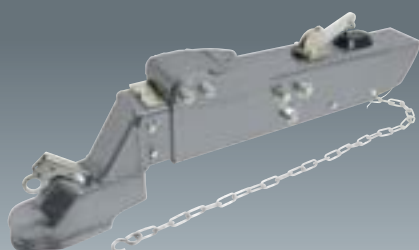
MODEL 20 2-5/16" DROP COUPLER WITH MOUNTING CHANNEL



20,000 pound max. capacity, GVWR, 2,000 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
N/A	4042700	Drum	Std	80	12	2374400	2374600	1848700	2-5/16" Coupler Bolt-On
N/A	4042720	Drum	Std	80	12	2374400	2374600	1848700	2-5/16" Coupler Bolt-On
N/A	4750700	Disc	Std	80	12	4747100	4749501042	1848700	2-5/16" Coupler Bolt-On
N/A	4750710	Disc	Std	80	12	4747100	4749501042	1848700	2-5/16" Coupler Bolt-On
N/A	4750720	Disc	Std	80	12	4747100	4749501042	1848700	2-5/16" Coupler Bolt-On
1734700	N/A	Drum	Std	80	12	2374400	2374600	1848700	2-5/16" Coupler Bolt-On
4830200	N/A	Disc	Std	80	12	4747100	4749501042	1848700	2-5/16" Coupler Bolt-On

MODEL 20 2-5/16" DROP COUPLER LESS MOUNTING CHANNEL



20,000 pound max. capacity, GVWR, 2,000 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1735100	N/A	Drum	Non	76	12	2374400	2374600	1848700	2-5/16" Coupler Weld-On
4830400	N/A	Disc	Non	76	12	4747100	4749501042	1848700	2-5/16" Coupler Weld-On
4830410	N/A	Disc	Non	76	12	4747100	4749501042	1848700	2-5/16" Coupler Weld-On
4830420	N/A	Disc	Non	76	12	4747100	4749501042	1848700	2-5/16" Coupler Weld-On

For 3" wide trailer tongue. Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 20 2-5/16" STRAIGHT LESS MOUNTING CHANNEL



20,000 pound max. capacity, GVWR, 2,000 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1521000	N/A	Drum	Std	74	15	2374400	2374600	1848700	2-5/16" Coupler Weld-On
4750500	N/A	Disc	Std	74	15	4747100	4749501042	1848700	2-5/16" Coupler Weld-On
4750510	N/A	Disc	Std	74	15	4747100	4749501042	1848700	2-5/16" Coupler Weld-On
4750520	N/A	Disc	Std	74	15	4747100	4749501042	1848700	2-5/16" Coupler Weld-On

Padlock (Master Lock #30) works with a 2-5/16" ball coupler. Disc brake version available upon request.
Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 20 LEVELER CHANNEL (4) AND MOUNTING CHANNEL 14K



14,000 pound max. capacity, GVWR, 1,400 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
N/A	4836600	Drum	Std	82	15	2374400	2374600	1848700	With 18820 2-5/16" Coupler
N/A	4822800	Disc	Std	82	15	4747100	4749501042	1848700	With 18820 2-5/16" Coupler
N/A	4822820	Disc	Std	82	15	4747100	4749501042	1848700	18820 2-5/16" Coupler Solenoid and Cover

Padlock (Master Lock #30) works with a 2-5/16" ball coupler. Disc brake version available upon request.
Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 20 LEVELER CHANNEL (4) AND MOUNTING CHANNEL 20K



20,000 pound max. capacity, GVWR, 2,000 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
N/A	4831700	Drum	Std	70	15	2374400	2374600	Basic ACT Only
N/A	4821200	Disc	Std	70	15	4747100	4749501042	Basic ACT Only
N/A	4821210	Disc	Std	70	15	4747100	4749501042	Basic ACT Only
N/A	4821220	Disc	Std	70	15	4747100	4749501042	Basic ACT Only
N/A	4836200	Drum	Std	82	15	2374400	2374600	With Lunette Eye
N/A	4821300	Disc	Std	82	15	4747100	4749501042	With Lunette Eye

Padlock (Master Lock #30) works with a 2-5/16" ball coupler. Disc brake version available upon request.
Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 20 WITH LEVELER CHANNEL (4) LESS MOUNTING CHANNEL 14K



14,000 pound max. capacity, GVWR, 1,400 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
1889800	N/A	Drum	Std	82	15	2374400	2374600	1848700	With 18820 2-5/16" Coupler
4750000	N/A	Disc	Std	82	15	4747100	4749501042	1848700	With 18820 2-5/16" Coupler
4750010	N/A	Disc	Std	82	12	4747100	4749501042	1848700	With 18820 2-5/16" Coupler
4750020	N/A	Disc	Std	82	12	4747100	4749501042	1848700	With 18820 2-5/16" Coupler

Padlock (Master Lock #30) works with a 2-5/16" ball coupler. Disc brake version available upon request.
Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 20 LEVELER CHANNEL (4) LESS MOUNTING CHANNEL 20K



20,000 pound max. capacity, GVWR, 2,000 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
1899100	N/A	Drum	Std	70	15	2374400	2374600	Basic ACT Only
4749800	N/A	Disc	Std	70	15	4747100	4749501042	Basic ACT Only
4749810	N/A	Disc	Std	70	12	4747100	4749501042	Basic ACT Only
4749820	N/A	Disc	Std	70	12	4747100	4749501042	Basic ACT Only
1811700	N/A	Drum	Std	81	15	2374400	2374600	With 18078 Clevis Hitch
4749900	N/A	Disc	Std	81	15	4747100	4749501042	With 18078 Clevis Hitch
4749910	N/A	Disc	Std	81	12	4747100	4749501042	With 18078 Clevis Hitch
4749920	N/A	Disc	Std	81	12	4747100	4749501042	With 18078 Clevis Hitch
1777800	N/A	Drum	Std	82	15	2374400	2374600	With 16137 Lunette Eye
4750100	N/A	Disc	Std	82	15	4747100	4749501042	With 16137 Lunette Eye
47501010	N/A	Disc	Std	82	12	4747100	4749501042	With 16137 Lunette Eye
4750120	N/A	Disc	Std	82	12	4747100	4749501042	With 16137 Lunette Eye

Padlock (Master Lock #30) works with a 2-5/16" ball coupler. Disc brake version available upon request.
Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 20

CENTERED LEVELER CHANNEL (6) AND MOUNTING CHANNEL 20K

MODEL 20



20,000 pound max. capacity, GVWR, 2,000 pound tongue load.
GVWR limited to ball rating.

CENTERED

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
INNER: 4863400317 (PAINTED)								
4863500	N/A	Disc	Std	48	12	4747100	4749501042	Bolt-On
4863510	N/A	Disc	Std	53	12	4747100	4749501042	Bolt-On, Solenoid Cover Only
4863520	N/A	Disc	Std	52	12	4747100	4749501042	Bolt-On, Solenoid and Cover
4867700	N/A	Drum	Std	52	12	2374400	2374600	Bolt-On
4867710	N/A	Drum	Std	53	12	2374400	2374600	Bolt-On, Solenoid Cover Only
4867720	N/A	Drum	Std	53	12	2374400	2374600	Bolt-On, Solenoid and Cover
INNER: 4863400183 (PLATED)								
N/A	4864100	Disc	Std	48	12	4747100	4749501042	Bolt-On
N/A	4864110	Disc	Std	53	12	4747100	4749501042	Bolt-On, Solenoid Cover Only
N/A	4864120	Disc	Std	52	12	4747100	4749501042	Bolt-On, Solenoid and Cover
N/A	4867600	Drum	Std	53	12	2374400	2374600	Bolt-On
N/A	4867610	Drum	Std	52	12	2374400	2374600	Bolt-On, Solenoid Cover Only
N/A	4867620	Drum	Std	53	12	2374400	2374600	Bolt-On, Solenoid and Cover
N/A	4870700	Disc	Std	52	12	4747100	4749501042	Bolt-On, 4" Mounting Channel
N/A	4870710	Disc	Std	53	12	4747100	4749501042	Bolt-On, 4" Mounting Channel, Solenoid Cover Only
N/A	4870720	Disc	Std	53	12	4747100	4749501042	Bolt-On, 4" Mounting Channel, Solenoid and Cover
WELD-ON WITH LUNETTE EYE								
4866600	N/A	Drum	Std	53	12	2374400	2374600	Weld-On, Lunette Eye

Padlock (Master Lock #30) works with a 2-5/16" ball coupler. Disc brake version available upon request.
Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 20

OFFSET LEVELER CHANNEL (6) LESS MOUNTING CHANNEL 20K

20,000 pound max. capacity, GVWR, 2,000 pound tongue load.
GVWR limited to ball rating.



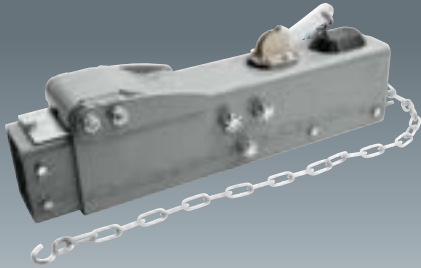
OFFSET

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
INNER: 4848400317 (PAINTED)								
4848500	N/A	Disc	Std	48	12	4747100	4749501042	Weld-On, Lunette Eye
4848600	N/A	Drum	Std	53	12	2374400	2374600	Weld-On, Lunette Eye
4850800	N/A	Drum	Std	52	12	2374400	2374600	With Weld Plate
4853220	N/A	Disc	Std	53	12	4747100	4749501042	Weld-On, Lunette Eye, Solenoid and Cover
4856900	N/A	Drum	Std	52	12	4747100	4749501042	Weld-On, Solenoid and Cover
4856920	N/A	Drum	Std	53	12	2374400	2374600	Weld-On
4876300	N/A	Drum	Std	53	12	2374400	2374600	Weld-On, Solenoid and Cover
4856820	N/A	Disc	Std	53	12	4747100	4749501042	Weld-On, Solenoid and Cover
INNER: 4848400183 (PLATED)								
N/A	4852700*	Drum	Std	48	12	2374400	2374600	Bolt-On, Lunette Eye,
N/A	4856500*	Disc	Std	53	12	4747100	4749501042	Bolt-On
N/A	4856520*	Disc	Std	52	12	4747100	4749501042	Bolt-On, Solenoid and Cover
N/A	4869800*	Disc	Std	53	12	4747100	4749501042	Bolt-On, Lunette Eye
N/A	4869810*	Disc	Std	52	12	4747100	4749501042	Bolt-On, Lunette Eye, Solenoid Cover Only
N/A	4869820*	Disc	Std	53	12	4747100	4749501042	Bolt-On, Lunette Eye, Solenoid and Cover
N/A	4876200*	Drum	Std	52	12	2374400	2374600	Bolt-On
4856600*	N/A	Drum	Std	53	12	2374400	2374600	Bolt-On, Lunette Eye
4856620*	N/A	Drum	Std	53	12	2374400	2374600	Bolt-On, Lunette Eye, Solenoid and Cover
4856700*	N/A	Drum	Std	53	12	2374400	2374600	Bolt-On
4856720*	N/A	Drum	Std	53	12	2374400	2374600	Bolt-On, Solenoid and Cover
4856420*	N/A	Disc	Std	53	12	4747100	4749501042	Bolt-On, Solenoid and Cover

Note: Padlock (Master Lock #30) works with a 2-5/16" ball coupler. Disc brake version available upon request.

Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required. *Not shown in the image above.

MODEL 20 LESS COUPLER AND MOUNTING CHANNEL



20,000 pound max. capacity, GVWR, 2,000 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
1055100	N/A	Drum	Std	65	18	2374400	2374600	Weld-On
4749700	N/A	Disc	Std	65	18	4747100	4749501042	Weld-On
4749710	N/A	Disc	Std	65	12	4747100	4749501042	Weld-On
4749720	N/A	Disc	Std	65	12	4747100	4749501042	Weld-On

Padlock (Master Lock #30) works with a 2-5/16" ball coupler. Disc brake version available upon request.
Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 20 STRAIGHT WITH LUNETTE EYE LESS MOUNTING CHANNEL



20,000 pound max. capacity, GVWR, 2,000 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
1297400	N/A	Drum	Std	79	15	2374400	2374600	Lunette Eye Weld-On

Padlock (Master Lock #30) works with a 2-5/16" ball coupler. Disc brake version available upon request.
Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 20 LUNETTE EYE AND MOUNTING CHANNEL



20,000 pound capacity, GVWR, 2,000 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	Description
4831800	N/A	Drum	Std	80	12	2374400	2374600	Lunette Eye Bolt-On
N/A	4837700	Drum	Std	80	12	2374400	2374600	Lunette Eye Bolt-On
N/A	4841600	Disc	Std	80	12	4747100	4749501042	Lunette Eye Bolt-On

Padlock (Master Lock #30) works with a 2-5/16" ball coupler. Disc brake version available upon request.
Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 20 4" MOUNTING CHANNEL



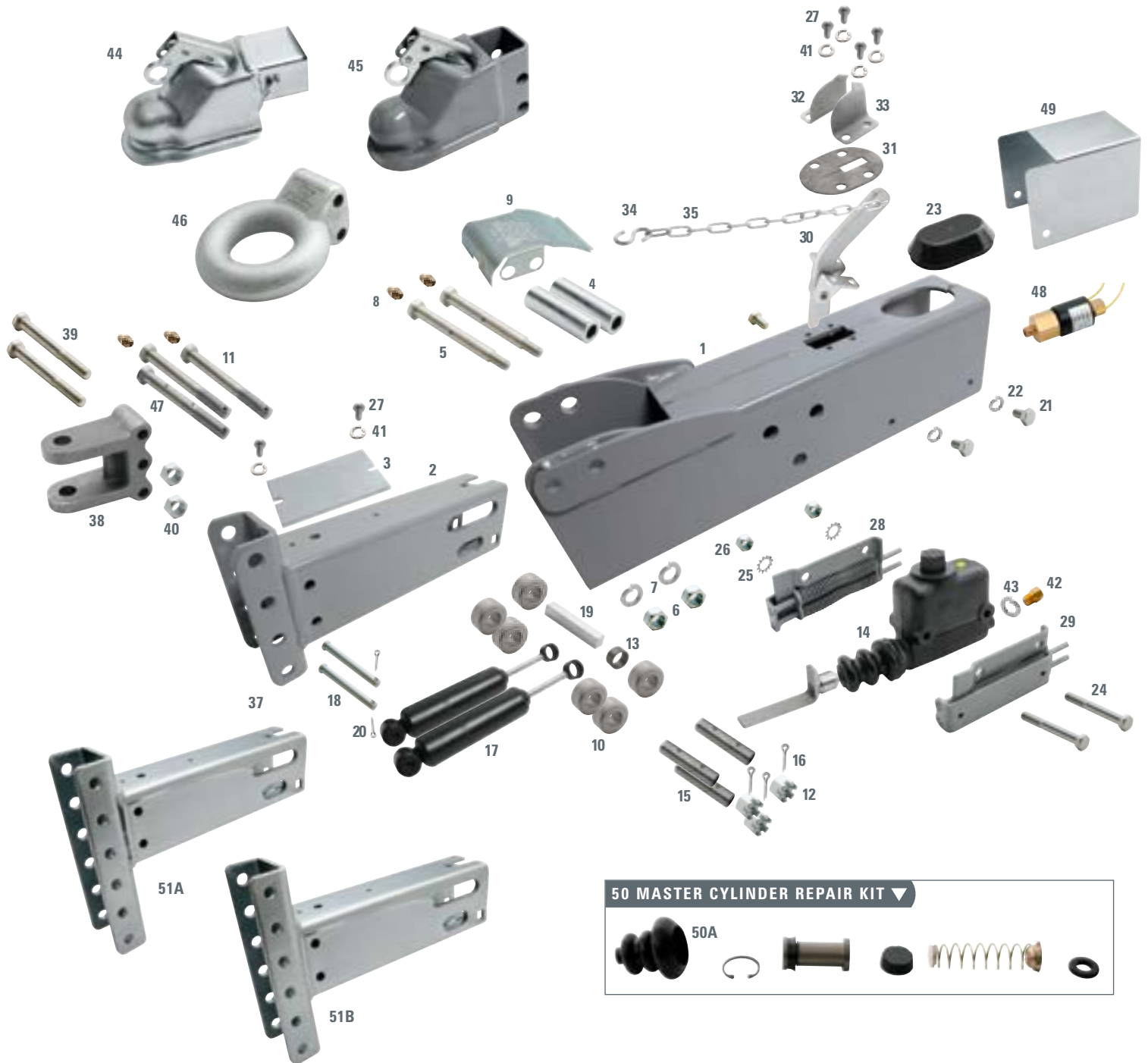
20,000 pound max. capacity, GVWR, 2,000 pound tongue load.
GVWR limited to ball rating.

Part No. Primed	Part No. Plated	Brake Type	Standard or Non-standard	Weight (pounds)	Pallet Qty.	Master Cyl.	Master Cyl. Assy.	CPLR Repair Kit	Description
N/A	4854000	Drum	Std	74	15	2374400	2374600	1848700	2-5/16" Coupler
N/A	4854010	Drum	Std	75	12	2374400	2374600	1848700	2-5/16" Coupler With Cover Only
N/A	4854020	Drum	Std	75	12	2374400	2374600	1848700	2-5/16" Coupler With Solenoid and Cover
N/A	4854100	Disc	Std	74	15	4747100	4749501042	1848700	2-5/16" Coupler
N/A	4854110	Disc	Std	75	12	4747100	4749501042	1848700	2-5/16" Coupler With Cover Only
N/A	4854120	Disc	Std	75	12	4747100	4749501042	1848700	2-5/16" Coupler With Solenoid and Cover

Padlock (Master Lock #30) works with a 2-5/16" ball coupler. Disc brake version available upon request.
Non-standard actuators require minimum 8-week lead time and minimum order quantity may be required.

MODEL 20

MODEL 20 ACTUATOR DIAGRAM ▼



MODEL 20

MODEL 20 ACTUATOR PRODUCT LIST

Part No. Drum	Part No. Disc	Description	Inner	Outer
1055100	4749700	No Hitch, Painted, Weld-On	1556300317	1055300317
	4749710	No Hitch, Painted, with Cover, Weld-On	1556300317	1055300317
	4749720	No Hitch, Painted, with Valve, Cover, Weld-On	1556300317	1055300317
1521000	4750500	2-5/16" Coupler, Painted, Weld-On	1278800	1055300317
	4750510	2-5/16" Coupler, Painted, with Solenoid Cover, Weld-On	1278800	1055300317
	4750520	2-5/16" Coupler, Painted, with Solenoid Cover, Weld-On	1278800	1055300317
1734700	4830200	2-5/16" Drop Coupler with Mounting Channel, Painted	4490400317	1734900
1735100	4830400	2-5/16" Drop Coupler, Painted, Weld-On	4490400317	1055300317
	4830410	2-5/16" Drop Coupler, Painted, with Cover, Weld-On	4490400317	1055300317
	4830420	2-5/16" Drop Coupler, Painted with Valve and Cover, Weld-On	4490400317	1055300317
1899100	4749800	4-Hole Leveler Channel, Painted, Weld-On	1058200317	1055300317
	4749810	4-Hole Leveler Channel, Painted with Cover, Weld-On	1058200317	1055300317
	4749820	4-Hole Leveler Channel, Painted with Cover and Valve, Weld-On	1058200317	1055300317
4831700	4821200	4-Hole Leveler Channel with Mounting Channel, Plated	1058200183	4488300
4836600	4822800	4-Hole Leveler Channel with Mounting Channel 18820 and Bolts, Plated	1058200183	4488300
	4822820	4-Hole Leveler Channel and Mounting Channel, 2-5/16" Coupler, Valve and Cover, Plated	1058200183	4488300
1811700	4749900	4-Hole Leveler Channel and 2-5/16" Coupler, Painted	1058200317	1055300317
	4749910	4-Hole Leveler Channel and 2-5/16" Coupler with Cover, Painted	1058200317	1055300317
	4749920	4-Hole Leveler Channel with 2-5/16" Coupler, Valve and Cover, Painted	1058200317	1055300317
1889800	4750000	4-Hole Leveler Channel with 2-5/16" Coupler and Mounting Bolts, Painted	1058200317	1055300317
	4750510	Leveler Channel with 2-5/16" Coupler and Cover, Painted	1058200317	1055300317
	4750520	Leveler Channel with 2-5/16" Coupler, Valve and Cover, Painted	1058200317	1055300317
4042700	4750700	2-5/16" Drop Coupler with Mounting Channel, Plated	4490400183	4488300
	4750710	2-5/16" Drop Coupler with Mounting Channel and Cover, Plated	4490400183	4488300
4042720	4750720	2-5/16" Drop Coupler with Mounting Channel, Cover, Valve, Plated	4490400183	4488300
4854000	4854100	4" Mounting Channel and 2-5/16" Drop Coupler, Plated	4490400183	4853900
4854010	4854110	4" Mounting Channel, 2-5/16" Drop Coupler, and Cover, Plated	4490400183	4853900
4854020	4854120	4" Mounting Channel, 2-5/16" Drop Coupler, Valve and Cover, Plated	4490400183	4853900
4053400	4847300	2-5/16" Straight Coupler, Mounting Channel, Plated	4488400	4488300
	4847320	2-5/16" Straight, Mounting Channel, with Valve and Cover, Plated	4488400	4488300
1297400		3" Lunette Eye, Weld-On, Painted	1297600	1055300317
4831800		Lunette Eye with Mounting Channel, Painted	1297600	1734900
4837700	4841600	Lunette Eye with Mounting Channel, Plated	1297600183	4488300
1777800	4750100	4-Hole Leveler Channel with Lunette Eye and Mounting Bolts, Painted	1058200317	1055300317
	4750110	4-Hole Leveler Channel with Lunette Eye and Mounting Bolts, Cover Painted	1058200317	1055300317
	4720120	4-Hole Leveler Channel with Lunette Eye, Valve and Cover, Painted	1058200317	1055300317
	4848500	6-Hole Offset with Lunette Eye and Mounting Bolts, Painted	4848400317	1055300317
	4853220	6-Hole Offset with Lunette Eye, Mounting Bolts, Valve and Cover, Painted	4848400317	1055300317
4848600		6-Hole Offset, Welded, with Lunette Eye, Mounting Bolts, Painted	4848400317	1055300317
4856900		6-Hole Offset Leveler Channel, with Valve and Cover, Painted	4848400317	1055300317
4856920		6-Hole Offset Leveler Channel, with Valve and Cover, Painted	4848400317	1055300317
4856700		6-Hole Offset Leveler Channel with Mounting Channel Outer, Painted	4848400317	1734900
4856720	4856520	6-Hole Offset Leveler Channel with Mounting Channel, Painted	4848400317	1734900
4852700		6-Hole Offset Leveler Channel, Mounting Channel, Plated, with Lunette and Bolts	4848400183	4488300
4856600		6-Hole Offset Leveler Channel with Mounting Channel, Plated	4848400183	4488300
4856620	4856420	6-Hole Offset Leveler Channel, with Mounting Channel, Plated, Valve and Cover	4848400183	4488300
4850800		6-Hole Offset, Flat Plate Welded, Painted	4848400317	4850700317
	4856820	6-Hole Offset, Painted, Valve and Cover	4848400317	1055300317
	4869800	6-Hole Offset, Plated, Mounting Channel, Lunette Eye	4848400183	4488300
	4869810	6-Hole Offset, Plated, Mounting Channel, Lunette Eye, Valve	4848400183	4488300
	4869820	6-Hole Offset, Plated, Mounting Channel, Lunette Eye, Valve and Cover	4848400183	4488300
4867700	4863500	6-Hole Centered Leveler Channel, Mounting Channel, Painted	4863400317	1734900
4867710	4863510	6-Hole Centered Leveler Channel, Mounting Channel, Cover, Painted	4863400317	1734900
4867720	4863520	6-Hole Centered Leveler Channel, Mounting Channel, Painted, Valve and Cover	4863400317	1734900
4867600	4864100	6-Hole Centered Leveler Channel, Plated, Mounting Channel	4863400183	4488300
4867610	4864110	6-Hole Centered Leveler Channel, Plated, Mounting Channel, Valve	4863400183	4488300
4867620	4864120	6-Hole Centered Channel, Plated, Valve and Cover	4863400183	4488300
	4869800	6-Hole Centered Leveler Channel with Lunette Eye	4863400183	4488300
	4869810	6-Hole Centered Leveler Channel with Lunette Eye, Cover	4863400183	4488300
4866600	4868920	6-Hole Centered Leveler Channel, 3" Eye, Valve and Cover, Painted	4863400317	1055300317

MODEL 20

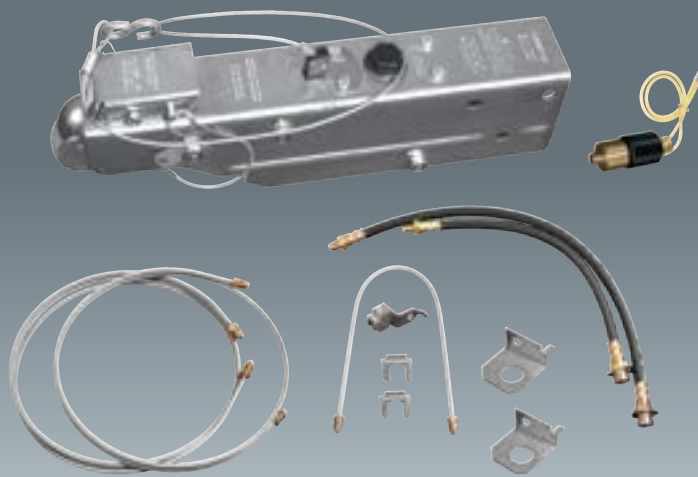
MODEL 20 ACTUATOR PARTS LIST

Ref No.	Part No.	Description	Quantity
1	1055300317	Outer Case, Painted, Weld-On	1
*	1734900	Outer Case with Mounting Channel, Painted	1
*	4488300	Outer Case with Mounting Channel, Plated	1
2	1556300317	Inner Slide - No Coupler, Painted	1
*	4490400317	Inner Slide with 2-5/16" Drop Coupler, Painted	1
*	4490400183	Inner Slide with 2-5/16" Drop Coupler, Plated	1
3	0828400	Centering Rail	1
4	1601900	Front Roller, Plated	2
5	0828800	Front Roller Bolt, Plated	2
6	0798500	Hex Nut, 1/2" NC	2
7	0793700	Lockwasher, 1/2" Standard	2
8	0144901	Grease Zerk	4
9A	0828900317	Front Roller Cover, Painted	1
9B	0828900183	Front Roller Cover, Plated	1
10	0829100	Rear Roller	6
11	0829400	Upper Rear Roller Bolt, 5" x 5/8" NF, Grade 5	2
12	0797100	Slotted Hex Nut, 5/8" NF	3
13	0332800	Spacer	1
	4830601	Filler Cap, Replacement for 2374400 Master Cylinder	1
14A	2374400	Master Cylinder, Drum Brake, 1-1/4" Bore	1
	4831600	Master Cylinder, Drum Brake, with 1209800 Orifice Connector	
14B	4747100	Master Cylinder, Disc Brake, 1-1/4" Bore	1
15	0829700	Spacer Sleeve	3
16	0799400	Cotter Pin 1/8" x 1-1/4"	3
17	0778400	Damper	2
18	0829800	Damper Pin	2
19	0830100	Push Rod Block	1
20	0799700	Cotter Pin 1/8" x 1"	2
21	0794800	Bolt, 5/16" x 1/2" NC, Grade 5	4
22	1248900	Star Lockwasher 5/16"	4
23	1507000	Master Cylinder Cover	1
24	0827100	Bolt, 3" x 3/8" NC, Grade 5	2
25	1255200	Star Lockwasher 3/8"	2
26	0797600	Hex Nut, 3/8" NC	2
27	0794900	Bolt, 5/16" x 5/8" NC, Grade 5	6
28	0838800	Right Hand Cylinder Spring Bracket	1
29	0838900	Left Hand Cylinder Spring Bracket	1
30	1054100	Breakaway Lever Assembly	1
31	1055200	Weather Seal	1
32	1052700	Right Hand Breakaway Lock	1
33	1052600	Left Hand Breakaway Lock	1
34	1055500	S-Hook	2
35	0776800	Safety Chain	1
36*	1297600	Inner Slide, 3" Lunette Eye	1
37A	1058200317	Inner Slide, 4-Hole Leveler Channel, Painted	1
37B	1058200183	Inner Slide, 4-Hole Leveler Channel, Plated	1
38	1807800	3 Bolt Clevis Hitch	1
39	0909300	Bolt, 4-1/4" x 5/8" NC, Grade 5	1
40	1040500	Locknut, 5/8" NC	1
41	0793800	Lockwasher, 5/16" Standard	6
42	1209800	Orifice Connector, Drum Brake, 1/8" NPT	1
*	1209900	Orifice, Drum Brake, Earlier 1/2" NF Thread Master Cylinder	1
*	0774500	Copper Gasket Used with 1209900 Orifice	1
44A	1278800	Inner Slide, 2-5/16" Coupler, Painted	1
44B	4488400	Inner Slide, 2-5/16" Coupler, Plated	1
45A	1882000	Adjustable 2-5/16" Coupler, Painted	1
45B	4721500	Adjustable 2-5/16" Coupler, Plated	1
46A	1613700	Lunette Eye, 3" Adjustable, Uncoated	1
46B	1613700183	Lunette Eye, 3" Adjustable, Plated	1
47	0829500	Lower Rear Roller Bolt, 5/8" x 5" NF, Grade 5	1
48	4748800	Solenoid Valve for Disc Brakes, with Male 1/8" NPT and Female 3/8" x 24 NF with Inverted Seat for Flared Fittings	1
*	4750200	Adapter, 1/2" NF to 1/8" NPT for Solenoid Valve On Early Master Cylinder	1
49A	4836100183	Cover for Solenoid Valve, Plated	1
49B	4836100	Cover for Solenoid Valve, Painted	1
50	1018700	2374400 Master Cylinder Repair Kit	1
50A	4359100	Master Cylinder Boot	1
51A	4848400183	Inner Slide, 6-Hole Leveler Channel, Offset	1
51B	4863400183	Inner Slide, 6-Hole Leveler Channel, Centered	1
*	1848700	2-5/16" Coupler Repair Kit	1
*	2374600	Drum Brake Master Cylinder Assembly with Brackets	1
*	4749501042	Disc Brake Master Cylinder Assembly with Brackets	1

Note: * = not shown in diagram

Shaded part #'s ending in "10" have solenoid covers only. Shaded part #'s ending in "20" have solenoids with covers. Unshaded part numbers do not have solenoids or covers.

DISC BRAKE KITS



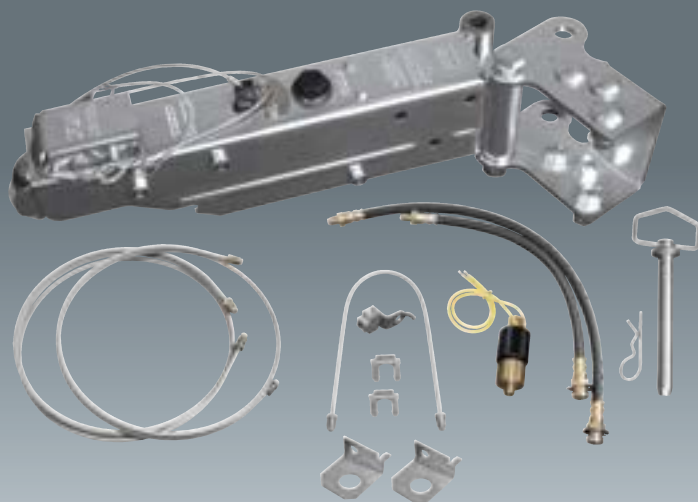
AERO 7500 ACTUATOR - DISC BRAKE KIT # 4843500
Single Axle Kit includes:

Part No.	Part Description
4606520	Aero 7500
4829900	Line Kit
4843000	2 End Kits



AERO 7500 ACTUATOR - DISC BRAKE KIT # 4843600
Tandem Axle Kit includes:

Part No.	Part Description
4606520	Aero 7500
4830000	Line Kit
4843000	4 End Kits



SWINGAWAY ACTUATOR - DISC BRAKE KIT # 4843300
Single Axle Kit includes:

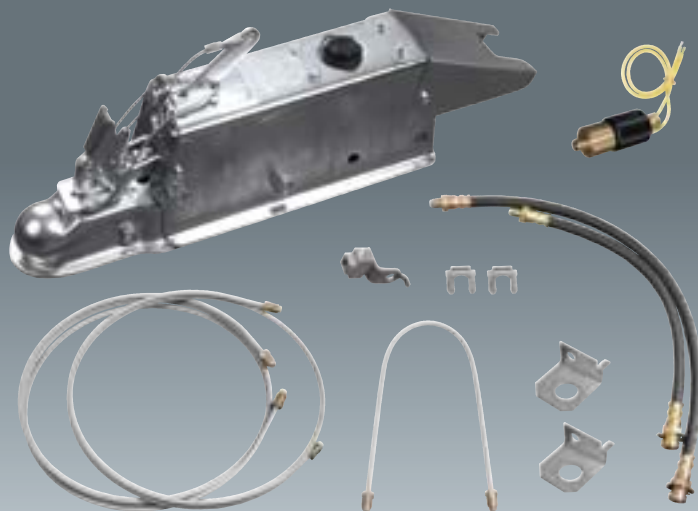
Part No.	Part Description
4839120	Swingaway Bolt Disc
4829900	Line Kit
4843000	2 End Kits



SWINGAWAY ACTUATOR - DISC BRAKE KIT # 4843400
Tandem Axle Kit includes:

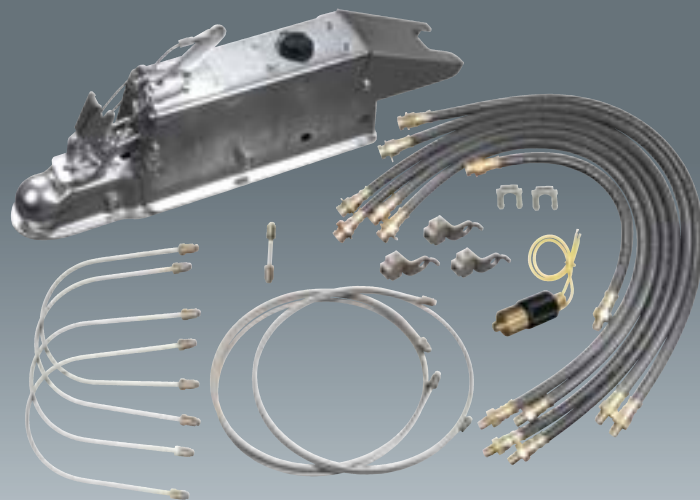
Part No.	Part Description
4839120	Swingaway Bolt Disc
4830000	Line Kit
4843000	4 End Kits

DISC BRAKE KITS



MODEL 60 ZX7000 ACTUATOR - DISC BRAKE KIT # 4843100
Single Axle Kit includes:

Part No.	Part Description
4715420	Model 60 with Solenoid
4829900	Line Kit
4843000	2 End Kits



MODEL 60 ZX7000 ACTUATOR - DISC BRAKE KIT # 4843200
Tandem Axle Kit includes:

Part No.	Part Description
4715420	Model 60 with Solenoid
4830000	Line Kit
4843000	4 End Kits



BRAKERITE - DISC BRAKE KIT # 4843800
Tandem Axle Kit includes:

Part No.	Part Description
4813100	BrakeRite Disc
4822100	Gel Cell Kit
4830000	Line Kit
4843000	4 End Kits



BRAKERITE II SD - DISC BRAKE KIT # 4843700
Tandem Axle Kit includes:

Part No.	Part Description
4835700	BrakeRite II SD
4822100	Gel Cell Kit
4830000	Line Kit
4843000	4 End Kits

LIMITED WARRANTY

Limited Warranty. Titan International (Titan) warrants its products to be free from defects in material and workmanship for one year from date of delivery to the original purchaser when properly installed, used and maintained by the purchaser.

This warranty does not apply to damage or loss caused by any or all of the following circumstances or conditions:

- Freight damage.
- Parts, accessories, materials or components not obtained from or approved in writing by Titan.
- Misapplication, misuse and failure to follow the directions or observe cautions and warnings on installation, operation, application, inspection or maintenance specified in any Titan quotation, acknowledgement, sales literature, specification sheet or installation instruction and service manual ("applicable literature").

If any Titan products are found upon Titan's examination to have been defective when supplied, TITAN will either: credit the purchaser's account for the purchase price of the Titan product; replace the Titan product; or repair the product. Titan has sole discretion in choosing which option to provide. For this LIMITED WARRANTY to apply, Titan must receive notice of the alleged defect within 30 days of either the discovery of the alleged defect or the expiration of the warranty period, whichever is earlier. Any claim not made within this period shall conclusively be deemed waived.

If requested by Titan, purchaser shall return the alleged defective product to Titan for examination at Titan's direction and return expense. Titan will not pay for expenses incurred in returning a product to Titan without Titan's prior written authorization. Titan shall not be liable for any other expenses purchaser incurs to remedy any defect. Purchasers waive subrogation on all claims under any insurance.

Limitation of Liability. It is expressly agreed that the liability of Titan is limited and Titan does not function as an insurer. THE REMEDIES SET FORTH IN THIS WARRANTY SHALL CONSTITUTE THE EXCLUSIVE REMEDIES AVAILABLE TO THE PURCHASER OR USER AND ARE IN LIEU OF ALL OTHER REMEDIES, EXPRESS OR IMPLIED. THE LIABILITY OF TITAN, WHETHER IN CONTRACT, IN TORT, UNDER ANY WARRANTY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE OF THE PARTICULAR PRODUCT MANUFACTURED, SOLD OR SUPPLIED BY TITAN.

To Obtain Technical Assistance. To enable Titan to respond to a request for assistance or evaluation of customer or user operating difficulty, please provide at a minimum the following information by calling 1-800-832-8781:

- Model number, serial number and all other data on the specific component that appears to be involved in the difficulty.
- The date and from whom you purchased your Titan product.
- State your difficulty, being sure to mention at least the following: application, nature of load involved, and weight of the load.

Field Service. If field service at the request of the purchaser is rendered and the difficulty is found not to be with Titan's product, the purchaser shall pay the time and expense (at the prevailing rate at the time of service) of seller's field representative(s). Charges for service, labor and other expenses that have been incurred by the purchaser, its customer or agent without prior written authorization of Titan will not be accepted.

TITAN EXTENDS NO WARRANTY, EXPRESS OR IMPLIED, ON PRODUCTS NOT MANUFACTURED BY TITAN OR TO TITAN'S DESIGN SPECIFICATION, INCLUDING BUT NOT LIMITED TO SUCH ITEMS AS NON-TITAN TIRES, BRAKES, ACTUATORS, BEARINGS, HOSE AND TUBING. PURCHASER'S RECOURSE SHALL BE LIMITED TO ANY WARRANTY OF THE RESPECTIVE MANUFACTURERS.

THIS WARRANTY EXCLUDES ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY PURPOSE.

THIS WARRANTY DOES NOT COVER NOR EXTEND TO INCIDENTAL OR CONSEQUENTIAL DAMAGE. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

No representative has authority to make any representation, promise or agreement except as stated in this Limited Warranty. TITAN reserves the right to make design and other changes upon its products without any obligation to install the same on any previously sold or delivered products.

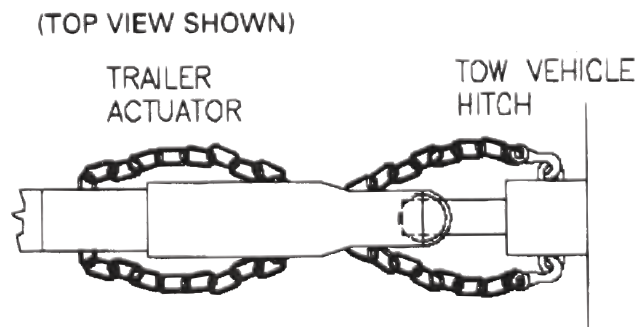
THERE ARE NO WARRANTIES THAT EXTEND BEYOND THOSE DESCRIBED ABOVE. EFFECTIVE JANUARY 1, 1998, THIS WARRANTY SUPERSEDES ALL PRIOR WARRANTIES, WRITTEN OR IMPLIED.

FOR WARRANTY CLAIMS CALL: 800-872-2327.

SAFETY WARNING

BrakeRite and Surge Actuators:

- 1) DO NOT submerge the actuator. Internal corrosion may result and cause brake failure. Salt water, granular fertilizers, and other corrosive materials are destructive to metal. To minimize the damaging effect of corrosion on a braking system used under corrosive conditions, we recommend that the actuator be externally flushed after each use with a high-pressure water hose. Be sure to lubricate all moving parts after the unit has dried. Whenever the unit will be out of service for an extended period of time, or after hard use, remove the brake drums and clean inside the brakes. Pack wheel bearings with grease before the drum is installed. Failure to properly and adequately grease and maintain the actuator could weaken it and/or cause it to fail and result in serious injury and/or property damage.
- 2) Failure to complete the "BRAKE FLUID FILLING AND BLEEDING" procedures promptly after installation may result in internal master cylinder corrosion and cause brake failure.
- 3) Use only fresh brake fluid from a sealed container. DO NOT reuse fluid. After filling and bleeding, remember to refill the actuator. Failure to maintain an adequate fluid level may cause brake failure.
- 4) To ensure proper engagement of the actuator's coupler to the tow ball, DO NOT use a multi-piece ball, an incorrectly sized ball or a worn/damaged ball.
- 5) The breakaway system is not designed to operate if the trailer does not separate completely from the tow vehicle, or if the trailer tongue "submarines" and goes beneath the tow vehicle. DO NOT use the breakaway system as a parking brake.
- 6) The trailer's safety chains' length MUST be set short enough so the actuator's breakaway cable/chain is not pulled if the coupler separates from the tow vehicle's hitch but remains connected by the safety chains. The breakaway system should only activate after BOTH the trailer's coupler AND safety chains have failed and allowed the trailer to completely separate from the tow vehicle. Provide just enough slack in the trailer safety chains to allow tight turns. The chains should not drag on the ground. Safety chains must be used. When towing, AVOID sharp turns which can cause the actuator to bind against the tow vehicle. This can damage the actuator and trailer, causing brake failure. AVOID towing across severe bumps or dips, which may cause the tow hitch to lever against the actuator/coupler and compromise the connection.
- 7) Trailer components must be used in accordance with the recommended load capacity provided by Titan.



NOTES

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Titan Tire Customer Care

PHONE: 1.800.USA-BEAR

FAX: 515.265.9212

WEB: www.titan-intl.com

Titan Tire Corporation • Des Moines, Iowa