SERVICE MANUAL TOURING COIL SUSPENSION LD

Introduction

The **CURT Touring Suspension LD (light duty, 3,500 lb. to 5,200 lb. gross axle weight rating)** features swing arms, coil springs, shock absorbers, bump stops and a track bar. Single and tandem axle touring suspension systems are offered for the light duty system with gross axle weight rating 3,500 lb. to 5,200 lb. A related suspension system, the Curt Touring Suspension HD (heavy duty) provides a similar platform for heavy duty trailers rated between 6,000 lb. to 8,000 lb. GAWR.

For additional support, please visit: **https://support.lci1.com/touring-coil-suspension/**

Images used in this document are for reference only and may not represent the exact product appearance.

SAFETY INSTRUCTIONS

Read and understand all instructions before installing or operating this product.
Adhere to all safety labels.

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system.

Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the LCI limited warranty.

⚠ WARNING

The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

Lift the trailer by the chassis. Do not go under the trailer unless it is properly supported. Unsupported trailers can fall and may result in death, serious injury or property damage.

Trailer MUST be supported per manufacturer's recommendations before working underneath. Failure to do so may result in death or serious personal injury.

Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.

⚠ CAUTION

The "CAUTION" symbol is a sign that a procedure has a risk involved that may cause personal injury or property damage if not performed safely and within the parameters set forth in this manual.

Moving parts can pinch, crush or cut. Keep clear and use caution.

Product Registration and Warranty

Curt stands behind our products with industry-leading warranties. To get copies of the product warranties, register your purchase or provide feedback, visit: **warranty.curtgroup.com/surveys**

PRODUCT INFORMATION

Touring Suspension With Anti-Lock Braking System

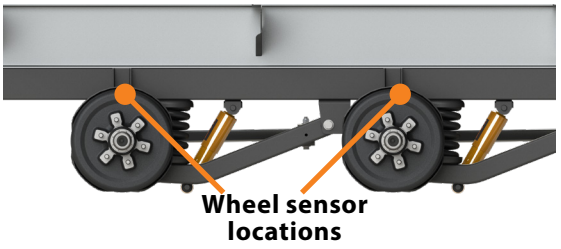
Some CURT Touring Suspension systems may be equipped with an Anti-Lock Braking System (ABS). Anti-lock braking systems are designed to improve stability of the trailer during severe braking events. When the ABS control is not active, or if there is no power to the ABS module, the tow brake signal from the vehicle will pass through to the trailer brakes, the same as on a trailer without ABS technology.

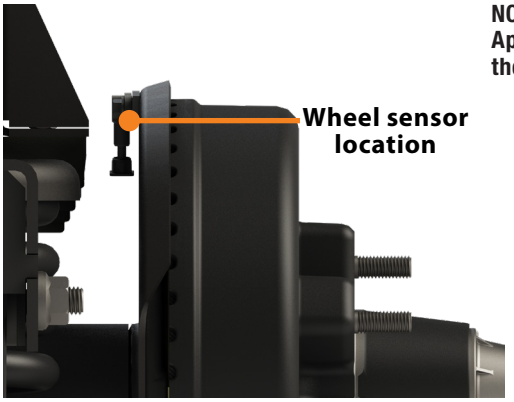
When the ABS system detects a wheel is about to lock, the brake signal from the tow vehicle is reduced on that specific wheel to maintain wheel rotation. The tow vehicle brake signal is monitored at all times, and a proxy load is in place to ensure the ABS system maintains compatibility with all tow vehicle brake controllers.

The ABS system features wheel sensors which must be handled carefully to avoid damage. The sensors are located on each wheel to measure tow vehicle brake signals.

⚠ CAUTION

The Touring Suspension system may be equipped with Anti-Lock Braking System (ABS) technology. Axles with ABS must be handled carefully during service so the brake sensors are not damaged.

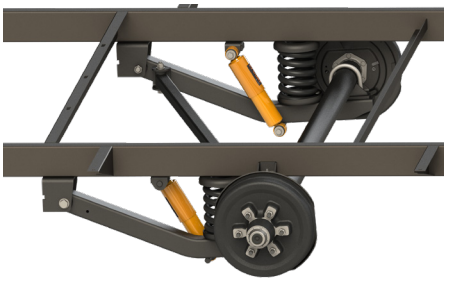


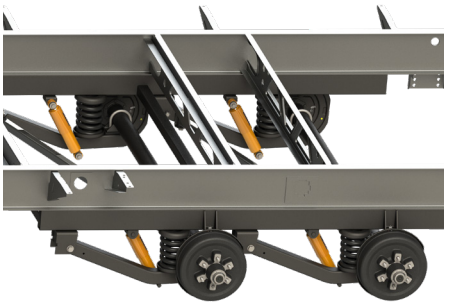


NOTE: 5200 lb. axles manufactured after April 2026 will have the ABS Sensor inside the brake hub mounted to the spindle.

Axle Configuration

Single and tandem axle versions of the CURT Touring Suspension LD are available. The single axle version of the system is shown on the left and the tandem axle version is shown on the right.





Torque Specifications

Component	ft-lb	Part Number
Shock Absorber Hardware	20-30	249853 + 2026069390
Bump Stop Hardware	20	376094
Spring Retainer Hardware	30	119070
Track Bar Hardware	80	2023019301 + 2021105034 + 134408
Trail Arm Hardware	175	2024122542 + 2020111006
Trail Arm Hardware (Old, Yellow)	200	138815 + 2020111006
U-Bolt. (5/8” - 18) + Yellow Loctite **Note:** Do not torque check U-bolts.	90	202301934829 + 2021101104

INSPECTING COMPONENTS

Shock Absorbers

Inspect shocks for fluid leakage or shiny spots around the shock body neck.
If leakage is found, replace the shocks.

Note: Shocks should be replaced every 5 years or 50,000 miles.

Coil Springs

If the suspension feels loose, check for excessive scuffing (large area)
around the contact area of the coil springs. If found, replace both coils.

Bump Stops

Check that bump stops are secured. If bump stops are loose or out of place, tighten bump stop hardware. The 3/8" lock nut securing the bump stop should be torqued to 20 ft-lb.

If the bump stop stud is bent, replace the bump stop and follow the fastening procedures.

Hardware

If any of the components of the touring suspension are replaced, it is recommended that the hardware securing the components, including bolts and nuts, should also be replaced with hardware of the same grade and specification as the original.

Trailing Arm Hardware

Examine the hardware used on the trailing arms. Older systems may use different hardware that has different torque specs.

Newer systems use silver Ecoguard flange top-lock nuts, and should always be torqued to 175 ft-lb

Older systems use yellow zinc locking nut, and should be always be torqued to 200 ft-lb.



Ecoguard flange top-lock nut



Zinc locking nut

Track Bar

Move the track bar back and forth and check for excessive movement or play at both mounting points. If excessive movement is found, replace the track bar.

If the track bar squeaks during movement, but movement is not excessive, lubricate the bushings at both ends using a spray-can formulation of one the approved greases listed below. Apply lubricant around the inner diameter of the track bar bushings at four points around its circumference.

Grease Zerks

If there is squeaking during travel, grease the bushings on the trailing arm using axle bearing grease listed on Engineering Specification ES-002 described below:

Grease should have following mark on the container:



Trailing Arm

Move the arms side to side and check for excessive movement or play.
If the trailing arm joints are loose, replace the bushings.

Approved Grease and Grease Products (Specification ES-002)

Kendall Motor Oil (Div. of Witco Corp.)	Kendall Super Blue L427 Grease	**Pennzoil-Quaker State**	Premium Wheel Bearing Grease 707L
Chem Arrow Corp.	Arrow 78981-1		Synthetic Red Grease
Citgo Petroleum	Lithoplex MP #2,	**Shell**	ALBIDA LC2,
	Lithoplex CM #2		ALBIDA Grease SLC 220
Exxon Company USA	Ronex, MP		ALBIDA Grease SLC 460
Great Plans Lubricants	Lithium Complex EP Grease NLGI 2	**Royal Mfg.**	Royal 987 Multi-Lube EP #2 Lithium Complex
Mobil Oil Co.	Mobil Grease HP	**Chevron Texaco**	Ulti-Plex Grease EP NLGI2
	Mobilith AW2		Starplex Moly MPGM2
	Mobil I Synthetic Grease	**Valvoline**	Valvoline Multi-Purpose GM
Mystik Oil Co. Inc.	Mystik JT-6 Hi-Temp Grease	**Oil Center Research of Oklahoma**	O: Liquid-O-Ring No. 167L
	Low Temp Blue Lithium Comp.	**76 Lubricants Co.**	6 Multiplex EP
	Red Lithium Complex EP No. 2		76 Multiplex RED

SHOCK & COIL REPLACEMENT

NOTICE

Shocks should be replaced every 5 years or 50,000 miles.

Step 1

Lift the chassis so the coil spring is fully extended.

Place jack stands underneath the trailer frame.

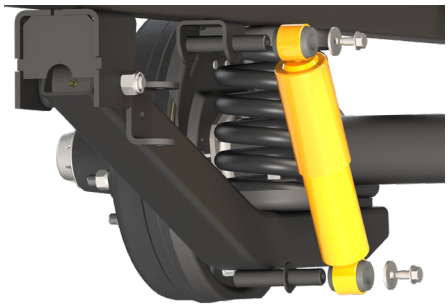
Place another pair of jack stands underneath the drop arms to prevent the axle from falling when the shock absorbers are removed.

Step 2

Loosen the 3/8" - 16 x 3/4" screws and washers securing the shock absorber onto the brackets.

Slide the shock absorber off the brackets and clean the brackets of residual dirt and grease.

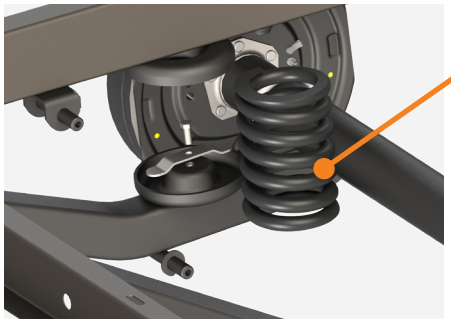
NOTE: If replacing the shock only, go to step 5, if replacing the coil spring then repeat step 2 on the shock absorber on the other end of axle before proceeding to step 3.



Step 3

Carefully lower the entire axle as far as necessary to access the 3/8" - 16 x 1" bolt securing the two-sided hat on the inside of the coil spring and remove it along with the spring.

Repeat on the other end of the axle.



Coil Spring removed for clarity to show two-sided hat.

Step 4

Apply Loctite® Blue 242® (see AP Kit on page 8) or equivalent to 3/8" - 16 x 1" bolt.

Note: Do **NOT** reuse the spring bolt.

Install new coil spring, two-sided hat, and 3/8" - 16 x 1" bolt with Loctite to secure the coil springs at both ends of the axle.

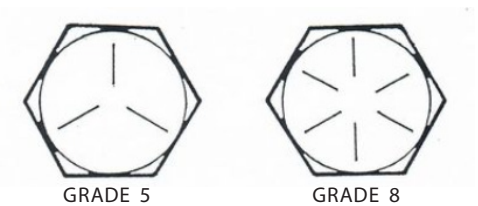
Torque the bolts to 30 ft-lb.

Step 5

Note: If Grade 5 bolts are originally installed, see Recall 26E-032 for Grade 8 replacements.

If needed, apply two threads of Loctite® Blue 242® (see AP Kit on page 8) or equivalent to the 3/8" - 16 x 3/4" Grade 8 bolt threads. Install new shock absorber on the brackets using bolts and washers to secure the shock absorber. Install new bolts by hand for a minimum of three full threads (or three turns) before torquing.

Torque the bolts to 20-30 ft-lb. Repeat steps 2-5 as needed for each axle.



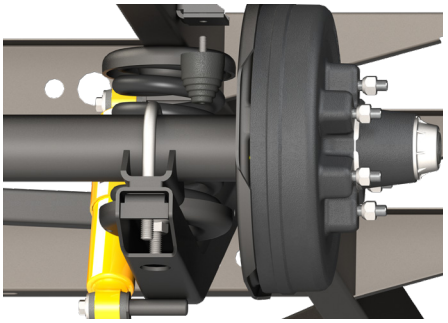
Step 6

Carefully lower the chassis back onto the ground.

BUMP STOP REPLACEMENT

Step 1

Insert bump stop through the mounting hole.



Step 2

Apply Loctite® Blue 242® (see AP Kit on page 8) or equivalent to 3.8" - 16 x 1" bolt.

Torque hardware to 20 ft-lb.

Note: New lock nuts must be used.

TRACK BAR REPLACEMENT

Step 1

Unbolt the four 1/2"-13 X 3-3/4” track bar bolts, one at each side of each track bar.

Inspect the track bars, inner bushings at both joints, and sleeves and replace as needed.

Step 2

Grease the inside of the bushings with any of the approved greases on page 3.

Assemble the greased bushings and sleeves inside the track bar joint welds at each side.



Step 3

Center the track bars between the swing arm bracket and axle shaft bracket. Use a pry bar to install the track bar more easily.

Insert the two 1/2"-13 X 3-3/4” track bar bolts from underneath the brackets with washers on both ends and locknuts.

Torque the bolts to 80 ft-lb.

Note: All hardware must be replaced. See AP Kit in the Trailing Arm & U-bolt Replacement Section.



TRAILING ARM BUSHINGS REPLACEMENT

Step 1

Remove the track bar following the procedure described above.

Step 2

Lift the chassis so the coil spring is fully extended.
Place jack stands underneath the trailer frame.

Place another pair of jack stands underneath the drop arms to prevent the axle from falling when the shock absorbers are removed.

Step 3

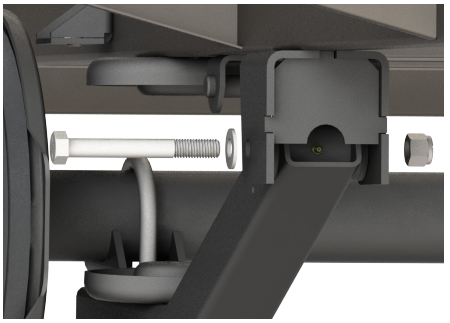
Remove shock absorbers following the procedure described above.

Do not remove the coil spring unless replacing it as well.

Step 4

Unbolt the 5/8”-11 X 5” swing arm bolt. Gently lower the axle by carefully removing the jack stands/supports placed under it above, allowing the trailing arms to swing forward until the tires contact the ground.

Once the trailing arm is removed from its upper mounting bracket, tap the bushings and inner sleeve out.



Step 5

Grease the inside of the bushings with any of the approved greases listed on page 3.

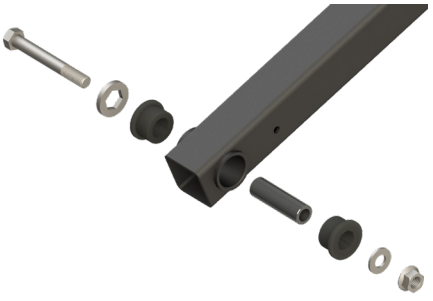
Assemble the bushings and inner sleeve and reinstall the arm in its mounting bracket.

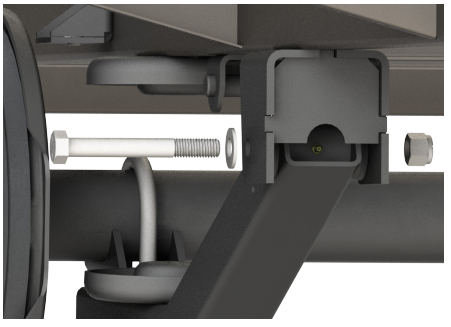
Note: All bolts will go through the curbside of the hanger with the nut on the roadside.

Install the 5/8”-11 X 5” swing arm bolt, hex hole washer, washer and top lock flange nut in reverse of step 4.

Note: All hardware must be replaced. See AP Kit on page 8.

Note: See page 2 for Trail Arm Hardware Specs.





Step 6

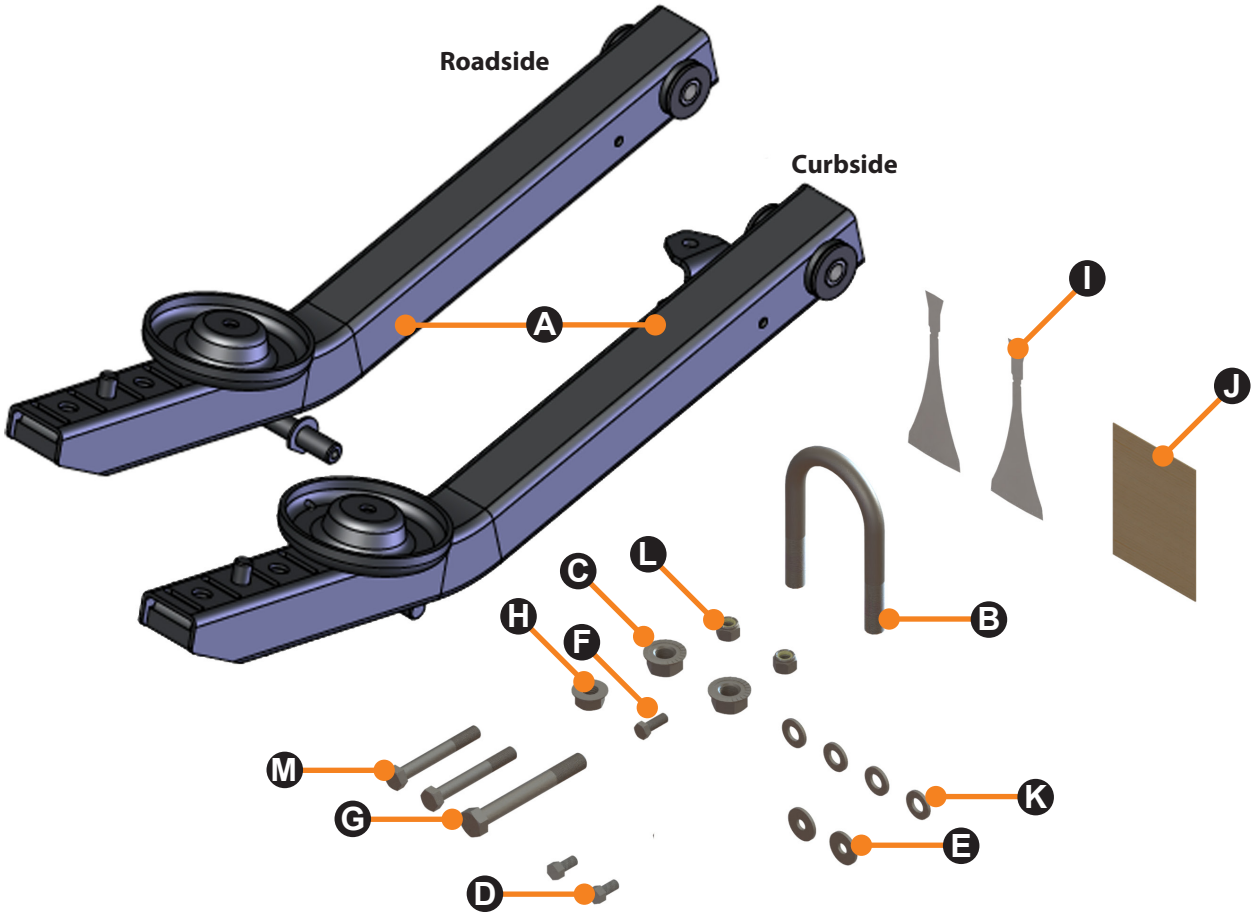
Reinstall the shock absorbers following the procedure described above.

Gently lower the unit to the ground being sure to seat the upper face of the coil springs properly and reinstall the track bar following the procedure for track bar replacement above.

TRAILING ARM & U-BOLT REPLACEMENT

Note: Do NOT reuse hardware. All Trailing Arm and U-bolt replacements must be completed with the approved AP Kits in the table below.

Kit Number	Description
2026080706	AP KIT - TCS ARM ASSY - REPLACEMENT - CS - LD TCS
2026080707	AP KIT - TCS ARM ASSY - REPLACEMENT - RS - LD TCS



ITEM	PART NO.	DESCRIPTION	QTY
A	2024116595	TCS ARM ASSY - CS - LD TCS 1	1
	2024116596	TCS ARM ASSY - RS - LD TCS 1	
B	202301934829	FASTEN - U-BOLT - 5/8"-18 X 6" - FOR 3" TUBE - GEOMET - TCS FASTEN	1
C	2021101104	FASTEN NUT - 5/8" - 18 SFLNGN CLR CH ST 2	2
D	2026069390	FASTEN BOLT 3/8"-16 X 3/4" HEX CAP SCREW ZN GR8	2
E	249853	FASTEN WASHER 3/8" ID X 1 1/4" OD X 1/8" - FENDER WASHER	2
F	119070	BOLT - 3/8"-16 X 1" TAP GR5 ZN FTHD ST	1
G	2023019300	FASTEN BOLT - 5/8"-11 X 5" - HEX PTHD GR8 ST	1
H	2024122542	FASTEN – NUT 5/8"-11 FLANGE NUT TOP LOCK, GR. G	1
I	2026080547	LUBRICANT - THREADLOCKER - LOCTITE 243 - 0.02 OZ - CAPSULE	2
J	CCD-0008218	SERVICE MANUAL FOR CURT TOURING COIL SUSPENSION LD	1
K	134408	WASHER - 9/16" X 1" X 1/8"; (FLAT) YELLOW DICH	4
L	2021105034	FASTEN - NUT - 1/2" - 13 - NYLON INSERT LOCK NUT ZINC	2
M	2023019301	FASTEN BOLT - 1/2" - 13 X 3 3/4" - HEX PTHD GR8 ST - TCS	2

Note: **Do NOT reuse hardware. All Trailing Arm and U-bolt replacements must be completed with the approved AP Kits in the table above.**

Step 1

Remove the track bars following the procedure described above ("Track Bar Replacement" on page 6). This can be performed with the trailer under load prior to lifting.

Step 2

Lift the chassis so the coil spring is fully extended. Place jack stands underneath the trailer frame.

Place another pair of jack stands underneath the drop arms to prevent the axle from falling when the shock absorbers are removed.

With the axle fully assembled and lifted, carefully heat the two U-bolt nuts that secure the trailing arm using a propane torch. Heating the nuts softens the thread adhesive, making them easier to remove. Do not overheat the hardware. Thread adhesive begins to break down at approximately 500°F (260°C).

NOTICE

The U-bolt threads are secured with yellow thread adhesive and cannot be loosened easily with mechanical force alone. Carefully heat them to loosen the chemical bond before attempting to loosen the nuts.

Step 3

Remove shock absorbers and coil springs following the procedure described above ("Shock & Coil Replacement" on page 5).

Step 4

Remove the trailing arm assembly following the procedure described above ("Trailing Arm Bushings Replacement" on page 7).

Gently lower the entire axle and trailing arm assembly away from the trailer and onto the ground.

Step 5

If not already done, carefully heat the flange bolts prior to loosening them following the instructions in step 2 above.

Use a breaker bar and a 5/8" socket to loosen the flange nuts securing the U-bolt.

Note: It may be helpful to carefully relocate the entire axle from under the trailer and lift the trailing arms up to access the flange nuts.

⚠ CAUTION

If equipped with anti-lock brake hubs, be careful to avoid breaking the anti-lock brake sensors attached to the backplate of the brake assembly while the axle is removed from the trailing arms. For further information on ABS equipped axles, see "Touring Suspension With Anti-Lock Braking System" on page 2.

Once the flange nuts are removed, carefully pry up on the U-Bolt to remove it and separate the axle shaft, shim plate, and trailing arms.



Step 6

Note: Always use a new U-bolt and flange nuts when remounting the axle.

Insert the U-bolt the bolt threads through the holes on the axle mounting bracket. Align the shim plate on the trailing arm, and insert the U-bolt through the shim plate and trailing arm assembly.

Note: If using a Lippert brand U-bolt replacement, DO NOT use additional thread locking adhesive. Lippert U-bolts come pre-applied with thread locking adhesive.

Secure the U-bolt with the flange nuts.

Torque the 3/4" flange nuts to 110 ft-lb.

If the other arm needs replacing, repeat the procedure above on the other side of the axle.

Step 7

If removed earlier, reposition the axle and trailing arms underneath the trailer.

Replace the greased trailing arm bushings and install the trailing arms following the procedure described above ("Trailing Arm Bushings Replacement" on page 7).

Replace the shock absorbers and coil springs by following the procedure following the procedure described above ("Shock & Coil Replacement" on page 5).

Gently lower the trailer to the ground and replace the track bar following the procedure described above ("Track Bar Replacement" on page 6).

Note: The track bar can be installed with the trailer tires on the ground.

MAINTENANCE SCHEDULE

Item	Function Required	3,000 Miles	6,000 Miles	12 Months / 36,000 Miles (Whichever comes first)
Brakes	Test that they are operational.	At Every Use		
Brake Adjustment	Adjust to proper operating clearance. Not required for self-adjusting brakes.	♦		
Suspension Trailing Arms	Inspect for bending, loose fasteners, wear.		♦	
Bump Stops	Inspect for loose fasteners, proper positioning, security, wear.		♦	
Track Bars	Inspect for bending, loose fasteners, wear. Apply grease.		♦	
Gas Shock	Inspect for leaks or damage, loose fasteners.		♦	
Coil Springs	Inspect for loose fasteners, wear.		♦	
Brake Magnets	Inspect for wear and current draw.			♦
Brake Linings and Pads	Inspect for wear or contamination.			♦
Hub/Drum and Rotors	Inspect for abnormal wear or scoring.			♦
Wheel Bearing	Inspect for corrosion or wear. Clean and repack.			♦
Seals	Inspect for leakage. Replace if removed.			♦
U-bolts	Tighten to specified torque values			♦