

H TECHNICAL PROCEDURE

SOFTEK® • STEERTEK NXT / STEERTEK • AIRTEK® for International Truck Vehicles

SUBJECT: Service Instructions

LIT NO: 17730-252

DATE: December 2011

REVISION: E

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SECTION 1

Introduction

This publication is intended to acquaint and assist maintenance personnel in the preventive maintenance, service, repair and rebuild of the following Hendrickson equipment as installed on applicable International Truck vehicles:

- **SOFTEK®** — An integrated monoleaf spring suspension with the STEERTEK NXT axle.
- **STEERTEK NXT** — A durable, lightweight, fabricated steer axle assembly.
- **AIRTEK®** — An integrated front air suspension with the STEERTEK axle.

See AIRTEK, SOFTEK and STEERTEK NXT parts lists to determine the components that are manufactured by Hendrickson. For components not manufactured or supplied by Hendrickson contact the vehicle manufacturer for proper preventive maintenance and rebuild instructions.

NOTE

Use only  Hendrickson Genuine parts for servicing this suspension system.

It is important to read and understand the entire Technical Procedure publication prior to performing any maintenance, service, repair, or rebuild of the product. The information in this publication contains parts lists, safety information, product specifications, features, proper maintenance, service, repair and rebuild instructions for the SOFTEK / AIRTEK Suspension and the STEERTEK NXT axle.

Hendrickson reserves the right to make changes and improvements to its products and publications at any time. Contact Hendrickson Tech Services for information on the latest version of this manual at 1-866-755-5968 (toll-free U.S. and Canada), 630-910-2800 (outside U.S. and Canada) or email: techservices@hendrickson-intl.com.

The latest revision of this publication is available online at www.hendrickson-intl.com.



SECTION 2 Product Description

STEERTEK NXT — Integrated into the SOFTEK systems as well as being an option on International's 2-leaf mechanical suspension system, see Figure 2-2. The box-shaped design provides a stiffer axle and resists torsional, longitudinal and vertical loads more effectively than traditional I-beam axles. Together with the front limbs of the leaf springs, the robotically welded axle beam forms a torsion system, enhancing roll stability characteristics and improving handling.

Axle Clamp Group — The Clamp Group consists of the top pad, 3/4" U-bolts, washers, and nylon locknuts

Adjustable Tie Rod — To help maximize tire life, the tie rod easily adjusts toe-in/out.

Steering Knuckles — The steering and tie rod arms are integrated for increased strength and reduced weight. The unique steering knuckle packaging delivers up to 55° wheel cut. The two piece knuckle design makes replacing the kingpin bushings easier by eliminating the need to remove the kingpins.

SOFTEK — Lightweight mechanical front suspension and steer axle system, see Figure 2-1. As with AIRTEK, Hendrickson has engineered the following components to optimize the performance of the SOFTEK System.

Monoleaf Spring Assembly — The lightweight, durable design provides excellent ride and handling, and eliminates inner leaf friction that is inherent to typical 2-leaf suspension systems.

AIRTEK (available prior to August 2011) — Winner of the 2001 Automotive News and Cap Gemini Ernst & Young PACE Award for Product Innovation, AIRTEK is an integrated front air suspension and robotically welded steer axle that work together to form an integrated torsion system. This lightweight system provides enhanced driver comfort and is ideal for on-highway line and bulk haul operations, see Figure 2-3. Utilizing a system approach, Hendrickson has engineered and optimized the following components to form a system delivering superior ride, stability and handling characteristics with reduced weight and maintenance.

Air Springs — Exclusive to Hendrickson, the lightweight air springs deliver an extremely soft ride. The air springs are engineered to support 85% of the vertical load while providing very low spring rate.

AIRTEK Leaf Spring Assembly — With its innovative design, the leaf spring provides superior stability, performance and a soft ride. The patented leaf spring shares loads with the air spring. Durable rubber front and rear bushings are greaseless and only require periodic inspections.

Shock Absorbers — SOFTEK / AIRTEK utilizes premium shocks that have been tested and tuned specifically for the SOFTEK / AIRTEK system.

Frame Brackets — Optimized designs deliver weight reduction and proven durability.



FIGURE 2-1

SOFTEK Monoleaf Suspension and STEERTEK NXT axle System
Capacity: 12,000 pounds,
Suspension Weight: 217 pounds

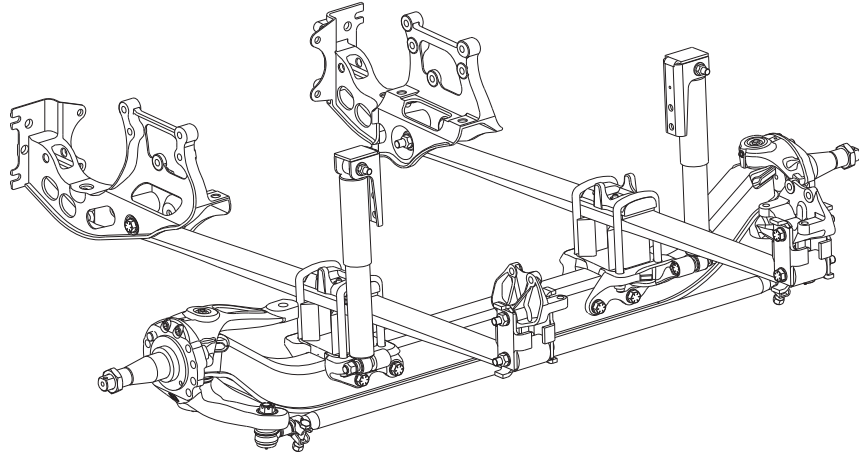


FIGURE 2-2

STEERTEK NXT axle with International's Parabolic, Taper Leaf (2-Leaf) Mechanical Suspension
Capacity: 12,000, 12,350, 13,000, 13,200, 14,000, 14,600 pounds

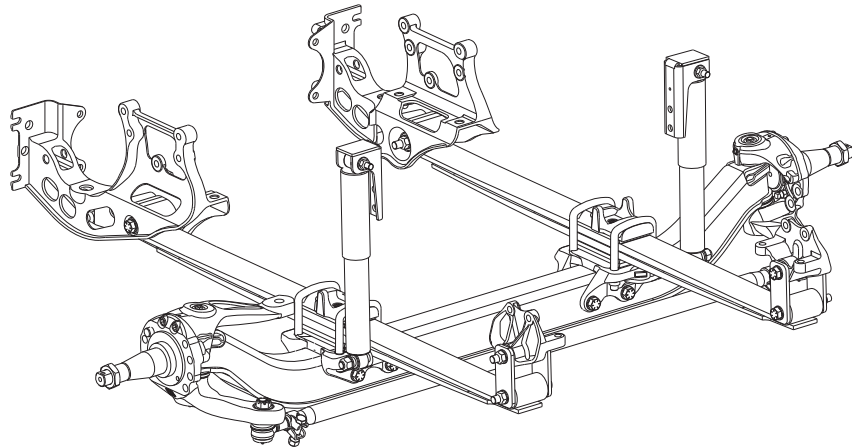
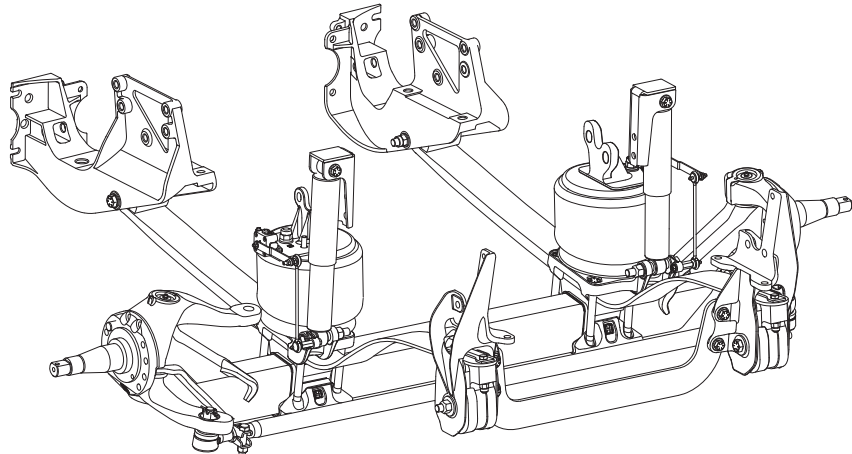


FIGURE 2-3

AIRTEK Air Suspension and STEERTEK axle System (available prior to August 2011)
Capacity: 12,000 pounds,
Suspension Weight: 275 pounds (w/Belly Band), 263 pounds (w/o Belly Band)

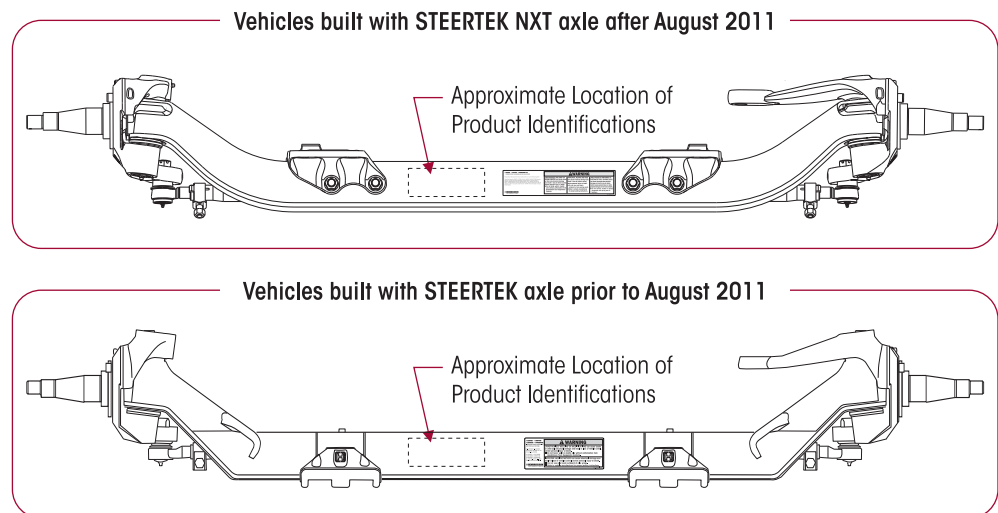




TECHNICAL NOTES

1. SOFTEK and AIRTEK are approved for on-highway usage with up to 15 percent operation on unpaved secondary roads. Other applications must be pre-approved by both Hendrickson and vehicle manufacturer. This system has a 12,000 pound capacity. System capacity represents maximum loads on tires at ground level.
2. The STEERTEK NXT axle is available with 69.02" and 70.89" Kingpin Intersections (KPI).
3. The STEERTEK NXT axle offers 4.25" and 5.36" axle beam drop height. Axle beam drop is measured from the kingpin intersection to the top of the axle.
4. AIRTEK suspension weight includes rear frame hangers, main springs, bushings, air springs and air spring brackets, height control system, shocks, upper shock brackets, belly band (if equipped) and axle attachment hardware.
5. STEERTEK NXT axle system weight is based on a 4.25" drop height and a 70.87" KPI axle. Weight includes, axle beam with axle spring seats, knuckle/steering arm assemblies and tie rod assemblies.
6. SOFTEK is an integral to and available exclusively with the STEERTEK NXT axle. STEERTEK NXT can be used in applications that are up to 100 percent off road. Contact Hendrickson for approval and guidelines on any application that exceeds 15 percent off road usage. This system is anti-lock braking system (ABS) ready. STEERTEK NXT is compatible with industry standard wheel ends and brakes. STEERTEK NXT is also available with mechanical suspension options. Contact Hendrickson or vehicle manufacturer for availability.
7. The STEERTEK NXT axle product identification is etched on the front of the axle beam providing the following information, see Figure 2-4:
 - Axle part number: Identifies the features of the axle beam.
 - Axle assembly number: Identifies the complete assembly, which includes the steering knuckles and bracket assemblies.

FIGURE 2-4 Front view of axle showing approximate location of etched Product Identification.





SECTION 3

Important Safety Notice

Proper maintenance, service and repair is important to the reliable operation of the suspension. The procedures recommended by Hendrickson and described in this technical publication are methods of performing such maintenance, service and repair.

The warnings and cautions should be read carefully to help prevent personal injury and to assure that proper methods are used. Improper maintenance, service or repair may damage the vehicle, cause personal injury, render the vehicle unsafe in operation, or void manufacturer's warranty.

Failure to follow the safety precautions in this manual can result in personal injury and/or property damage. Carefully read and understand all safety related information within this publication, on all decals and all such materials provided by the vehicle manufacturer before conducting any maintenance, service or repair.

■ EXPLANATION OF SIGNAL WORDS

Hazard "Signal Words" (Danger-Warning-Caution) appear in various locations throughout this publication. Information accented by one of these signal words must be observed to help minimize the risk of personal injury to service personnel, or possibility of improper service methods which may damage the vehicle or render it unsafe.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

Additional 'Notes' or 'Service Hints' are utilized to emphasize areas of procedural importance and provide suggestions for ease of repair. The following definitions indicate the use of these signal words as they appear throughout the publication.



INDICATES AN IMMINENTLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL RESULT IN SERIOUS INJURY OR DEATH.



INDICATES A POTENTIAL HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, CAN RESULT IN SERIOUS INJURY OR DEATH.



INDICATES A POTENTIAL HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR OR MODERATE INJURY, OR PROPERTY DAMAGE.

NOTE

An operating procedure, practice condition, etc. which is essential to emphasize.

SERVICE HINT

A helpful suggestion, which will make the servicing being performed a little easier and/or faster.

Also note that particular service operations may require the use of special tools designed for specific purposes. These special tools can be found in the Special Tools Section of this publication.



The torque symbol alerts you to tighten fasteners to a specified torque value. Refer to Torque Specifications Section of this publication.



■ SAFETY PRECAUTIONS



WARNING

FASTENERS

DISCARD USED FASTENERS. ALWAYS USE NEW FASTENERS TO COMPLETE A REPAIR. FAILURE TO DO SO COULD RESULT IN FAILURE OF THE PART, OR MATING COMPONENTS, LOSS OF VEHICLE CONTROL, PERSONAL INJURY, OR PROPERTY DAMAGE.

LOOSE OR OVER TORQUED FASTENERS CAN CAUSE COMPONENT DAMAGE, LOSS OF VEHICLE CONTROL, PROPERTY DAMAGE, OR SEVERE PERSONAL INJURY. MAINTAIN CORRECT TORQUE VALUE AT ALL TIMES. CHECK TORQUE VALUES ON A REGULAR BASIS AS SPECIFIED, USING A REGULARLY CALIBRATED TORQUE WRENCH. TORQUE VALUES SPECIFIED IN THIS TECHNICAL PUBLICATION ARE FOR HENDRICKSON SUPPLIED FASTENERS ONLY. IF NON HENDRICKSON FASTENERS ARE USED, FOLLOW TORQUE SPECIFICATION LISTED IN THE VEHICLE MANUFACTURER'S SERVICE MANUAL.



WARNING

AIR SPRINGS

AIR SPRING ASSEMBLIES MUST BE COMPLETELY DEFLATED PRIOR TO LOOSENING ANY CLAMP GROUP HARDWARE, OR OTHERWISE PERFORMING ANY MAINTENANCE, SERVICE OR REPAIR OF THE SUSPENSION SYSTEM. UNRESTRICTED AIR SPRING ASSEMBLIES CAN VIOLENTLY SHIFT. DO NOT INFLATE AIR SPRING ASSEMBLIES WHEN THEY ARE UNRESTRICTED. AIR SPRING ASSEMBLIES MUST BE RESTRICTED BY SUSPENSION OR OTHER ADEQUATE STRUCTURE. DO NOT INFLATE BEYOND PRESSURES RECOMMENDED BY AIR SPRING MANUFACTURER, CONTACT HENDRICKSON TECHNICAL SERVICES FOR DETAILS. IMPROPER USE OR OVER INFLATION MAY CAUSE AIR SPRING ASSEMBLIES TO BURST, CAUSING PROPERTY DAMAGE AND/OR SEVERE PERSONAL INJURY.



WARNING

WHEN SERVICING THE VEHICLE OR ATTACHING AN AIR SPRING AND THE VEHICLE IS ON THE GROUND, PRIOR TO AIRING THE SUSPENSION SYSTEM MAKE CERTAIN THE AIR SPRING LOCATOR IS INDEXED INTO THE UPPER AIR SPRING BRACKET PROPERLY, AND THE AIR SPRING IS FULLY SEATED ON THE TOP PAD. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PREMATURE AIR SPRING FAILURE, CAUSE PERSONAL INJURY, OR PROPERTY DAMAGE.



WARNING

PRIOR TO AND DURING DEFLATION AND INFLATION OF THE FRONT AIR SUSPENSION SYSTEM, ENSURE THAT ALL PERSONNEL AND EQUIPMENT ARE CLEAR FROM UNDER THE VEHICLE AND AROUND THE SERVICE AREA, FAILURE TO DO SO CAN CAUSE SERIOUS PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE.



WARNING

LOAD CAPACITY

ADHERE TO THE PUBLISHED CAPACITY RATINGS FOR THE SUSPENSIONS. ADD-ON AXLE ATTACHMENTS (I.E. SLIDING FIFTH WHEELS) AND OTHER LOAD TRANSFERRING DEVICES CAN INCREASE THE SUSPENSION LOAD ABOVE THE RATED AND APPROVED CAPACITIES WHICH COULD RESULT IN FAILURE AND LOSS OF VEHICLE CONTROL, POSSIBLY CAUSING PERSONAL INJURY OR PROPERTY DAMAGE.



WARNING

REPAIR OR RECONDITIONING

THE REPAIR OR RECONDITIONING OF SUSPENSION OR AXLE COMPONENTS IS NOT ALLOWED AS SHOWN ON LABEL IN FIGURE 3-3. ANY AXLE COMPONENTS FOUND TO BE DAMAGED OR OUT OF SPECIFICATIONS MUST BE REPLACED. ALL MAJOR HENDRICKSON COMPONENTS ARE HEAT TREATED AND TEMPERED. AIRTEK COMPONENTS CANNOT BE BENT, WELDED, HEATED, OR REPAIRED WITHOUT REDUCING THE STRENGTH OR LIFE OF THE COMPONENT. FAILURE TO FOLLOW THESE GUIDELINES CAN CAUSE LOSS OF VEHICLE CONTROL, POSSIBLE PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE AND WILL VOID APPLICABLE WARRANTIES.



WARNING

SHOCK ABSORBERS

THE SHOCK ABSORBERS ARE THE REBOUND TRAVEL STOPS FOR THE SPRINGS. ANYTIME THE FRONT AXLE ON AN AIRTEK SUSPENSION IS SUSPENDED IT IS MANDATORY THAT THE SHOCK ABSORBERS REMAIN CONNECTED. FAILURE TO DO SO COULD CAUSE THE AIR SPRINGS TO EXCEED THEIR MAXIMUM LENGTH, POSSIBLY CAUSING THE AIR SPRINGS TO SEPARATE FROM THE PISTON, OR CAUSE A REVERSE ARCH IN THE STEEL LEAF SPRINGS, POSSIBLY RESULTING IN PREMATURE STEEL LEAF SPRING FAILURE.



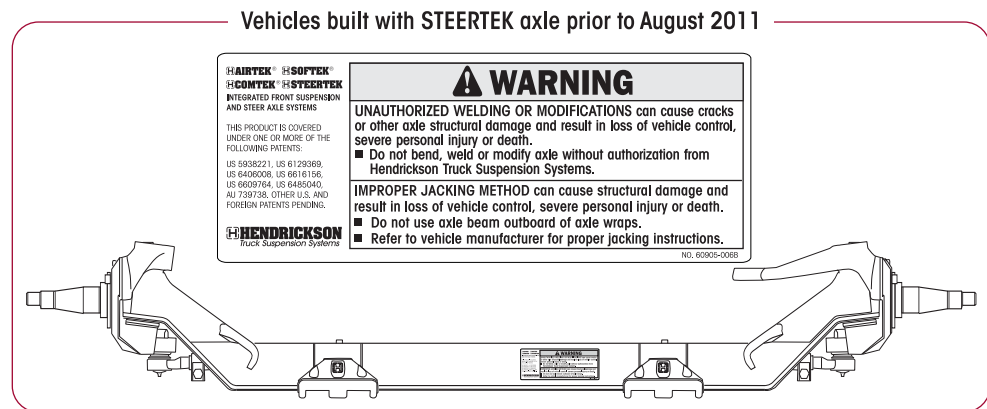
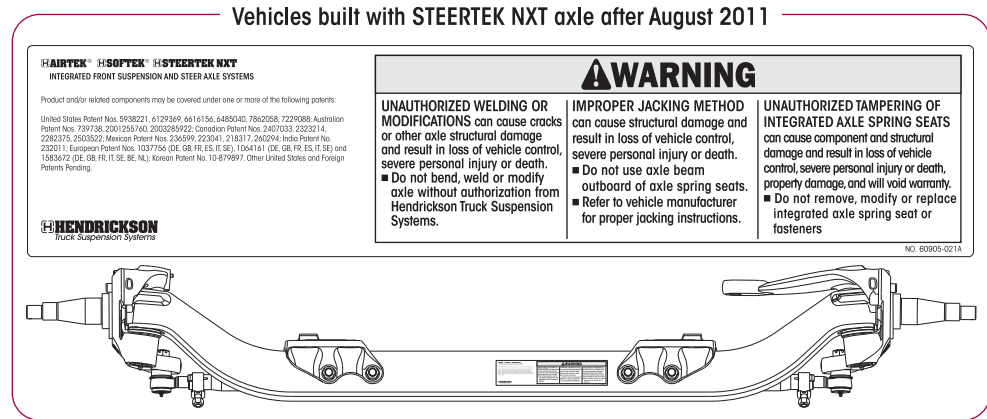
WARNING

AXLE CAMBER

UNAUTHORIZED WELDING OR MODIFICATIONS CAN CAUSE CRACKS OR OTHER AXLE STRUCTURAL DAMAGE AND RESULT IN LOSS OF VEHICLE CONTROL, SEVERE PERSONAL INJURY OR DEATH. DO NOT BEND, WELD OR MODIFY AXLE WITHOUT AUTHORIZATION FROM HENDRICKSON TRUCK SUSPENSION SYSTEMS.

AXLE CAMBER IS NOT ADJUSTABLE. DO NOT CHANGE THE AXLE CAMBER ANGLE OR BEND THE AXLE BEAM, SEE FIGURE 3-1. BENDING THE AXLE BEAM TO CHANGE THE CAMBER ANGLE CAN DAMAGE THE AXLE AND REDUCE AXLE STRENGTH, WILL VOID HENDRICKSON'S WARRANTY AND CAN CAUSE LOSS OF VEHICLE CONTROL, POSSIBLY CAUSING PERSONAL INJURY OR PROPERTY DAMAGE.

FIGURE 3-1 REPLACE ANY SAFETY DECALS THAT ARE FADED, TORN, MISSING, ILLEGIBLE, OR OTHERWISE DAMAGED. CONTACT HENDRICKSON TO ORDER REPLACEMENT LABELS.



WARNING

AXLE KINGPINS

STEERTEK NXT / STEERTEK IS A UNIQUE AXLE, IN THAT THE KINGPIN IS CRYOGENICALLY INSTALLED IN THE AXLE. THE KINGPIN IS A NON-REPLACEABLE COMPONENT OF THE AXLE ASSEMBLY. DO NOT TRY TO REMOVE THE KINGPIN. IF THE KINGPIN OR ADJACENT MATING SURFACE SHOW SIGNS OF DAMAGE OR MOVEMENT, DO NOT OPERATE THE VEHICLE AND IMMEDIATELY CONTACT THE HENDRICKSON TECH SERVICES DEPARTMENT.

DANGER

STEERTEK NXT AXLE SPRING SEATS

THE INTEGRATED AXLE SPRING SEATS ON THE STEERTEK NXT AXLE ARE NON-SERVICEABLE. UNAUTHORIZED TAMPERING OF INTEGRATED AXLE SPRING SEATS CAN CAUSE COMPONENT AND STRUCTURAL DAMAGE AND RESULT IN LOSS OF VEHICLE CONTROL, SEVERE PERSONAL INJURY OR DEATH, PROPERTY DAMAGE, AND WILL VOID ANY APPLICABLE WARRANTY. DO NOT REMOVE, MODIFY OR REPLACE INTEGRATED AXLE SPRING SEAT OR FASTENERS, SEE FIGURE 3-1.



WARNING

IMPROPER JACKING METHOD

IMPROPER JACKING METHOD CAN CAUSE STRUCTURAL DAMAGE AND RESULT IN LOSS OF VEHICLE CONTROL, SEVERE PERSONAL INJURY OR DEATH. DO NOT USE AXLE BEAM OUTBOARD OF AXLE SPRING SEATS. REFER TO VEHICLE MANUFACTURER FOR PROPER JACKING INSTRUCTIONS.



WARNING

DAMAGED AXLE COMPONENTS

IF A VEHICLE EQUIPPED WITH A STEERTEK NXT / STEERTEK AXLE IS INVOLVED IN A CRASH, THE AXLE STEER KNUCKLES MUST BE DISASSEMBLED AND A THOROUGH INSPECTION OF THE AXLE MUST BE PERFORMED NOTING THE CONDITION OF THE AXLE BEAM, KINGPINS, AND KNUCKLE ASSEMBLIES, INCLUDING THE AREAS OF AXLE TO KINGPIN INTERFACE, FOR ANY DAMAGE, GAPS, KINGPIN MOVEMENT OR PLAY. IF ANY COMPONENT APPEARS DAMAGED, OR THE KINGPINS APPEAR TO CONTAIN ANY DAMAGE, GAPS, MOVEMENT OR PLAY, THE COMPLETE AXLE ASSEMBLY MUST BE REPLACED.

IN ADDITION, IN THE EVENT A CRASH RESULTS IN EXCESSIVE SIDE LOAD DAMAGE TO ADJACENT PARTS, SUCH AS A BENT WHEEL, HUB, OR SPINDLE, IT IS STRONGLY RECOMMENDED TO REPLACE SUCH ADJACENT PARTS AND THE COMPLETE AXLE ASSEMBLY.

CONTACT HENDRICKSON TECHNICAL SERVICES WITH ANY QUESTIONS. FAILURE TO REPLACE ANY DAMAGED COMPONENTS CAN CAUSE LOSS OF VEHICLE CONTROL, POSSIBLE PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE AND WILL VOID ANY APPLICABLE WARRANTIES.



WARNING

MODIFYING COMPONENTS

DO NOT MODIFY OR REWORK PARTS WITHOUT AUTHORIZATION FROM HENDRICKSON. DO NOT SUBSTITUTE REPLACEMENT COMPONENTS NOT AUTHORIZED BY HENDRICKSON. USE OF MODIFIED, REWORKED, SUBSTITUTE OR REPLACEMENT PARTS NOT AUTHORIZED BY HENDRICKSON MAY NOT MEET HENDRICKSON'S SPECIFICATIONS, AND CAN RESULT IN FAILURE OF THE PART, LOSS OF VEHICLE CONTROL, POSSIBLE PERSONAL INJURY OR PROPERTY DAMAGE, AND WILL VOID ANY APPLICABLE WARRANTIES. USE ONLY HENDRICKSON AUTHORIZED REPLACEMENT PARTS.



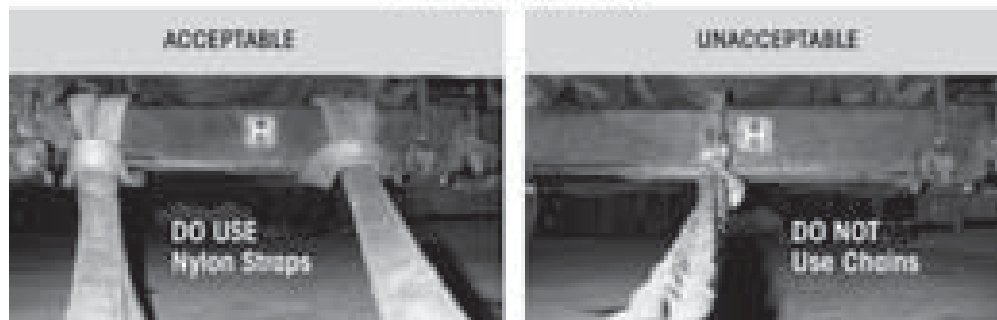
WARNING

OFF-ROADWAY TOWING

WHEN A VEHICLE IS DISABLED AND EQUIPPED WITH A STEERTEK NXT / STEERTEK AXLE, CARE MUST BE TAKEN TO ENSURE THERE IS NO DAMAGE TO THE SUSPENSION OR AXLE WHEN TOWING THE VEHICLE. THE USE OF A TOW STRAP IS NECESSARY TO TOW A DISABLED VEHICLE TO A REPAIR FACILITY PARKING LOT INTO THE SHOP BAY. THE TOW STRAPS SHOULD BE CONNECTED TO THE TOW HOOKS PROVIDED BY THE VEHICLE MANUFACTURER AT THE FRONT OF THE BUMPER. IF THE USE OF TOW HOOKS IS NOT AN OPTION, THEN A TOW STRAP MAY BE WRAPPED AROUND THE FRONT AXLE, (SEE FIGURE 3-2) IN A MANNER THAT IS ACCEPTABLE FOR TOWING THE VEHICLE FROM A REPAIR FACILITY PARKING LOT INTO THE SHOP BAY. DO NOT USE A TOW CHAIN AROUND THE FRONT AXLE OR WITH A SINGLE POINT LOCATION TO TOW THE VEHICLE. DOING SO WILL DAMAGE THE AXLE AND VOID ANY APPLICABLE WARRANTY, SEE FIGURE 3-2. FOR DETAILED TOWING INSTRUCTIONS FOR ON-HIGHWAY TOWING, SEE TOWING PROCEDURES SECTION IN THIS PUBLICATION.

FIGURE 3-2

OFF-ROADWAY TOWING



**CAUTION****PROCEDURES AND TOOLS**

A MECHANIC USING A SERVICE PROCEDURE OR TOOL WHICH HAS NOT BEEN RECOMMENDED BY HENDRICKSON MUST FIRST SATISFY HIMSELF THAT NEITHER HIS SAFETY NOR THE VEHICLE'S SAFETY WILL BE JEOPARDIZED BY THE METHOD OR TOOL SELECTED. INDIVIDUALS DEVIATING IN ANY MANNER FROM THE INSTRUCTIONS PROVIDED ASSUME ALL RISKS OF POTENTIAL PERSONAL INJURY OR DAMAGE TO EQUIPMENT INVOLVED.

**WARNING****PERSONNEL PROTECTIVE EQUIPMENT**

ALWAYS WEAR PROPER EYE PROTECTION AND OTHER REQUIRED PERSONAL PROTECTIVE EQUIPMENT TO HELP PREVENT PERSONAL INJURY WHEN PERFORMING VEHICLE MAINTENANCE, REPAIR OR SERVICE.

**WARNING****TORCH/WELDING**

DO NOT USE A CUTTING TORCH TO REMOVE ANY FASTENERS. THE USE OF HEAT ON SUSPENSION COMPONENTS WILL ADVERSELY AFFECT THE STRENGTH OF THESE PARTS. A COMPONENT DAMAGED IN THIS MANNER CAN RESULT IN THE LOSS OF VEHICLE CONTROL AND POSSIBLE PERSONAL INJURY OR PROPERTY DAMAGE.

EXERCISE EXTREME CARE WHEN HANDLING OR PERFORMING MAINTENANCE IN THE AREA OF THE SPRING ASSEMBLY AND AXLE. DO NOT CONNECT ARC WELDING GROUND LINE TO THE SPRING ASSEMBLY OR AXLE. DO NOT STRIKE AN ARC WITH THE ELECTRODE ON THE SPRING ASSEMBLY OR AXLE. DO NOT USE HEAT NEAR THE SPRING ASSEMBLY OR AXLE. DO NOT NICK OR GOUGE THE SPRING ASSEMBLY OR AXLE. SUCH IMPROPER ACTIONS CAN DAMAGE THE SPRING ASSEMBLY OR THE AXLE, AND CAN CAUSE LOSS OF VEHICLE CONTROL AND POSSIBLE PERSONAL INJURY OR PROPERTY DAMAGE.

**WARNING****SUPPORT THE VEHICLE PRIOR TO SERVICING**

PLACE THE VEHICLE ON A LEVEL FLOOR AND CHOCK THE WHEELS TO HELP PREVENT THE VEHICLE FROM MOVING. NEVER WORK UNDER A RAISED VEHICLE SUPPORTED ONLY BY A FLOOR JACK. ALWAYS SUPPORT A RAISED VEHICLE WITH SAFETY STANDS. BLOCK THE WHEELS AND MAKE SURE THE UNIT WILL NOT ROLL BEFORE RELEASING BRAKES. A JACK CAN SLIP OR FALL OVER. SERIOUS PERSONAL INJURY CAN RESULT.

**WARNING****PARTS CLEANING**

SOLVENT CLEANERS CAN BE FLAMMABLE, POISONOUS AND CAUSE BURNS. TO HELP AVOID SERIOUS PERSONAL INJURY, CAREFULLY FOLLOW THE MANUFACTURER'S PRODUCT INSTRUCTIONS AND GUIDELINES AND THE FOLLOWING PROCEDURE:

1. WEAR PROPER EYE PROTECTION
2. WEAR CLOTHING THAT PROTECTS YOUR SKIN
3. WORK IN A WELL VENTILATED AREA
4. DO NOT USE GASOLINE, OR SOLVENTS THAT CONTAIN GASOLINE. GASOLINE CAN EXPLODE
5. HOT SOLUTION TANKS OR ALKALINE SOLUTIONS MUST BE USED CORRECTLY. FOLLOW THE MANUFACTURER'S RECOMMENDED INSTRUCTIONS AND GUIDELINES CAREFULLY TO HELP PREVENT PERSONAL ACCIDENT OR INJURY

DO NOT USE HOT SOLUTION TANKS OR WATER AND ALKALINE SOLUTIONS TO CLEAN GROUND OR POLISHED PARTS. DOING SO WILL CAUSE DAMAGE TO THE PARTS AND VOID ANY APPLICABLE WARRANTY.