

Kelderman
Air Ride Conversion System
Ford 250/350 Two Bag Rear
1999 & Newer

RIDE COMFORT VERSION

Installation Instructions

Warranty Disclaimer Notice

Read Before Beginning Installation

Some Kelderman Air Ride Kits contain both fine thread and course thread fasteners, fittings, and air bag mountings.

Before attempting to tighten any threaded portion of the Air Ride check to be sure the threads are the same size and thread count.

Damaged or cross-threaded fasteners, fittings, and air bags, caused by improper size, thread count or misalignment are not covered by warranty.

Installation Instructions

The Kelderman 2 bag rear Air Ride is designed to allow the spare tire to be kept in the original location. The Air Ride frame bolts directly to the truck frame, in the same location as most aftermarket receiver hitches. Therefore a receiver hitch has been incorporated into the design of the unit. Vehicles with aftermarket bumpers that are too low to allow the Air Ride to be mounted properly to the frame should contact the factory, or authorized dealer for further instructions.

Before installation of the Air Ride unit, prepare a smooth, flat, hard surface and have all tools and equipment needed for the job.

Tools and equipment required:

- Cutting Torch, or Grinder**
- 2-Jacks**
- 2-Jack Stands**
- Wheel Chocks**
- Drill, and Drill Bits (1/4" and 9/16")**
- Combination Wrench Set**
- Socket Set**
- Hammer**
- Center Punch**
- Side Cutters**
- 2-C clamps**
- Teflon Tape, or Sealer**

Preparing The Truck For Installation

Park the truck on a smooth, flat, hard surface. Chock the front wheels of the truck, to prevent it from rolling forward or rearward. **Place a jack on each side of the truck frame ahead of the rear springs, front bolts.**

Installing The Air Ride

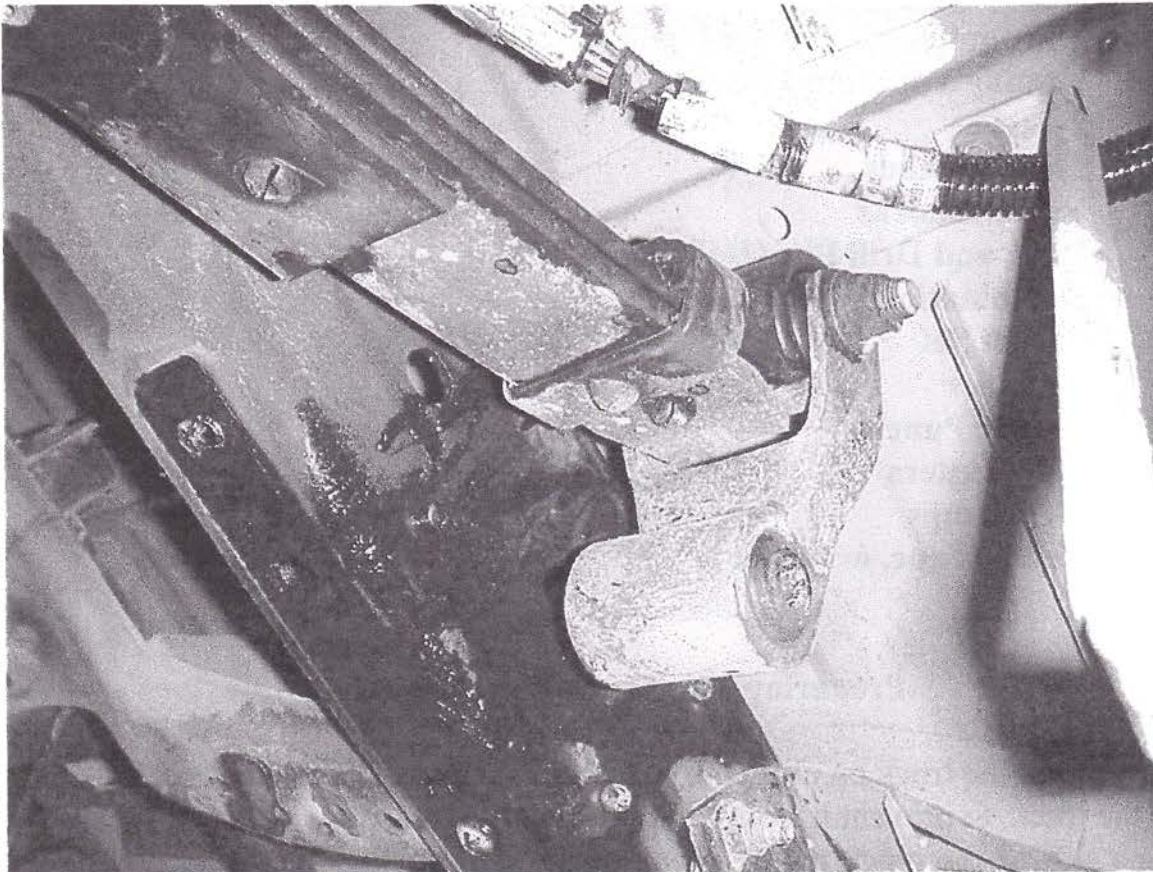
Caution

When raising or lowering the truck keep jack stands in place to prevent the truck from falling, which could cause personal injury or death.

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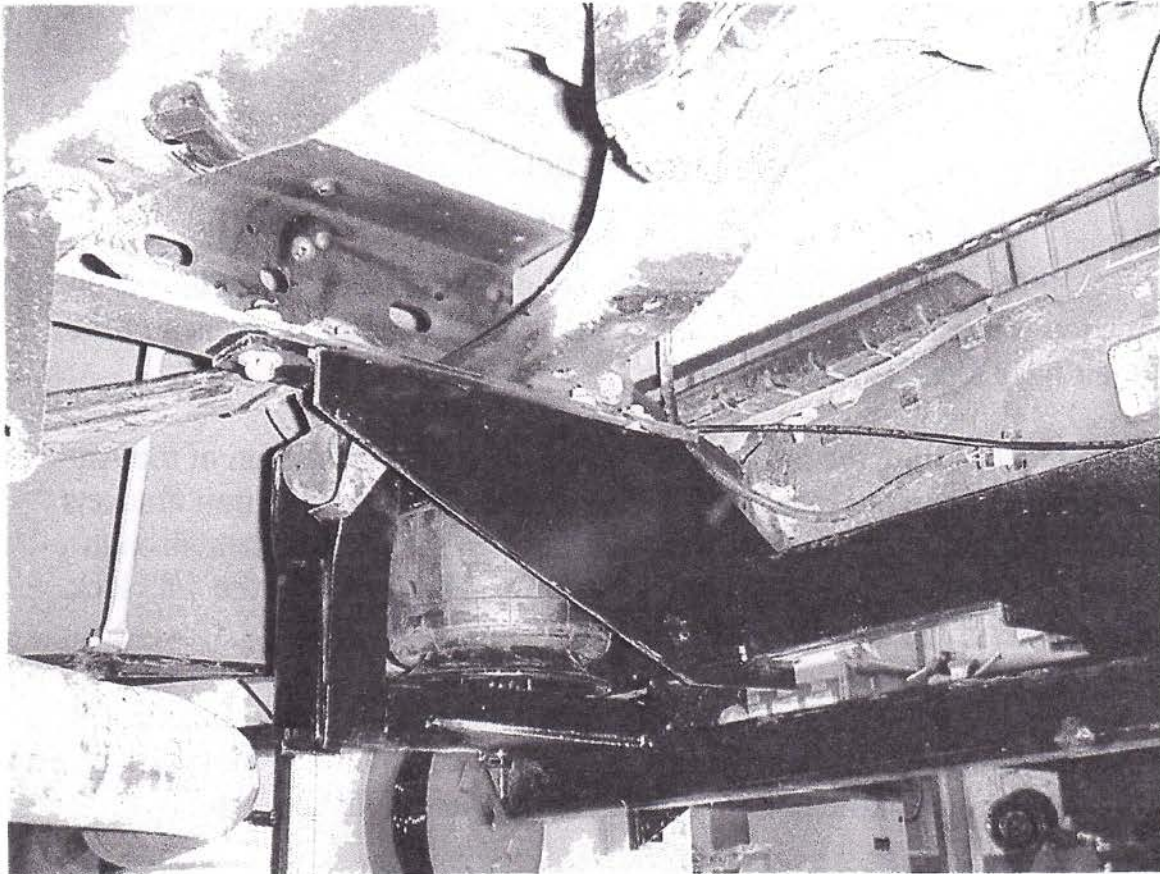
Step 1. Remove the spare tire and the rear tail pipe hanger.

Step 2. Raise the truck up enough to allow the rear spring lower shackle bolts to be removed. Remove the lower shackle bolt to separate that shackle from the mounting bracket. Repeat for opposite side of truck. Do not remove the spring shackles from the springs. See below.



Step 3. Using care not to damage the wiring or lines inside the frame, cut or grind off the rivets on the spring mounting brackets at the rear of the springs, and remove the brackets. Repeat for opposite side of truck.

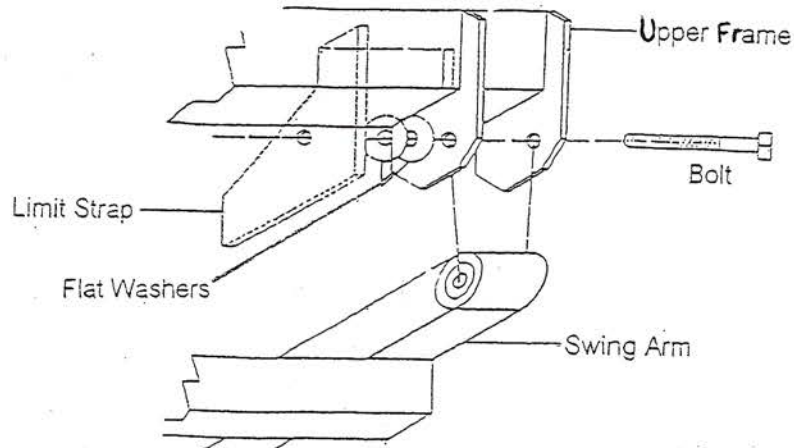
Step 4. Bolt the top section of the Air Ride to the bottom of the truck frame using the existing 4 holes on each side of the truck frame. See below.



Step 5. Install each bolt with the bolt head at the top and the nut on the bottom. In the rear holes, using the four $\frac{1}{2}$ " x $1\frac{1}{2}$ " bolts with a $\frac{5}{8}$ " flat washer on top, bolt the top section of the Air Ride to the truck frame with the receiver hitch toward the rear of the truck. Install the remaining $\frac{1}{2}$ " x 2" bolts in the remaining four holes and tighten.

Tighten all fasteners installed to this point.

Diagram 1



Step 6. With the fill hole to the outside of the truck fasten the air bags to the top frame of the Air Ride using a lock washer and nut on each of the four air bag studs. (see diagram 1)

Step 7. Using the 5/8" x 5" bolts attach the lower section of the Air Ride to the rear pivot brackets of the top frame. Remove the limit brackets from the kit and insert the 5/8" x 5" bolt through the bracket then through the top frame plates and lower frame bushing. This bolt uses the 5/8" lock nut included in the kit. (see diagram 1)

Step 8. Swing the lower section up to the air bags and install the 3/8" x 3" bolts with lock washer through the lower section air bag mounting plate and into the holes in the bottom of each air bag and tighten.

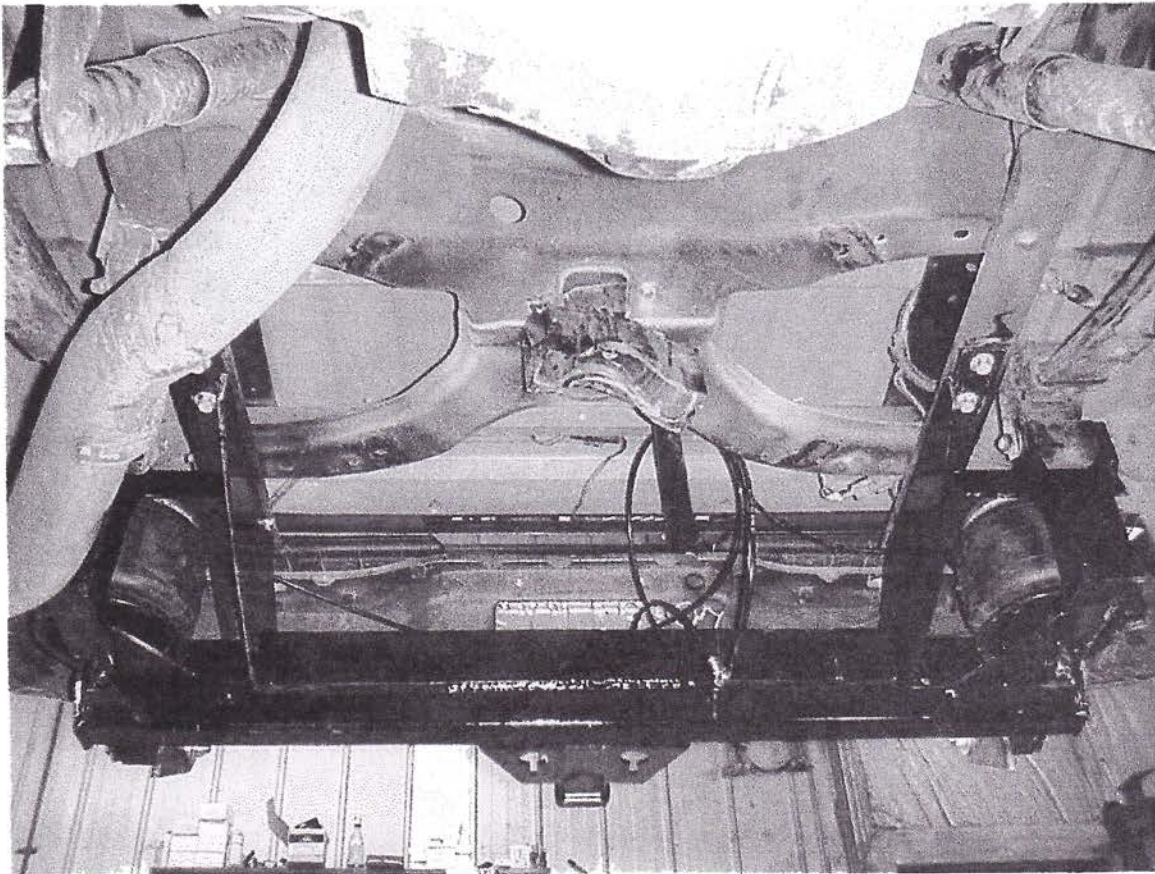
Step 9. Raise the truck frame high enough so that the spring shackles can be bolted to the front arms of the lower Air Ride section. (Use the original shackle bolt and nut that was removed in step 2). **Tighten all fasteners installed up to this point.**

Step 10. You will need to decide on a location for the fill valve (the only factor for determining this location is convenience. Normally it is installed on the left side of the rear bumper near the license plate). Drill a 9/16" hole in the desired location using caution not to damage wiring or other components of the truck. Insert the fill valve with Teflon tape or sealer, through the hole with a 1/2" flat washer on the outside and 1/4" coupler on the inside and tighten.

Step 11. Remove the three ¼” pipe thread to ¼” air line fittings from kit and tighten one ¼” fitting into each air bag. Cut one 6” piece of air line and insert into fill valve. Insert the other end into air line tee. From the remaining two open ends on the tee run a section of air line to each bag and assemble in the same manner as on the fill valve. **Tighten all air line fittings.** Check the routing of the air lines to be sure they are not exposed to anything which could burn, cut or otherwise damage them. Be sure the air lines are properly secured.

Step 12. Carefully remove the jacks and the jackstands. Inflate the air bags to approximately 25-30 psi and use soapy water or a leak detector to check all air line fittings for leaks.

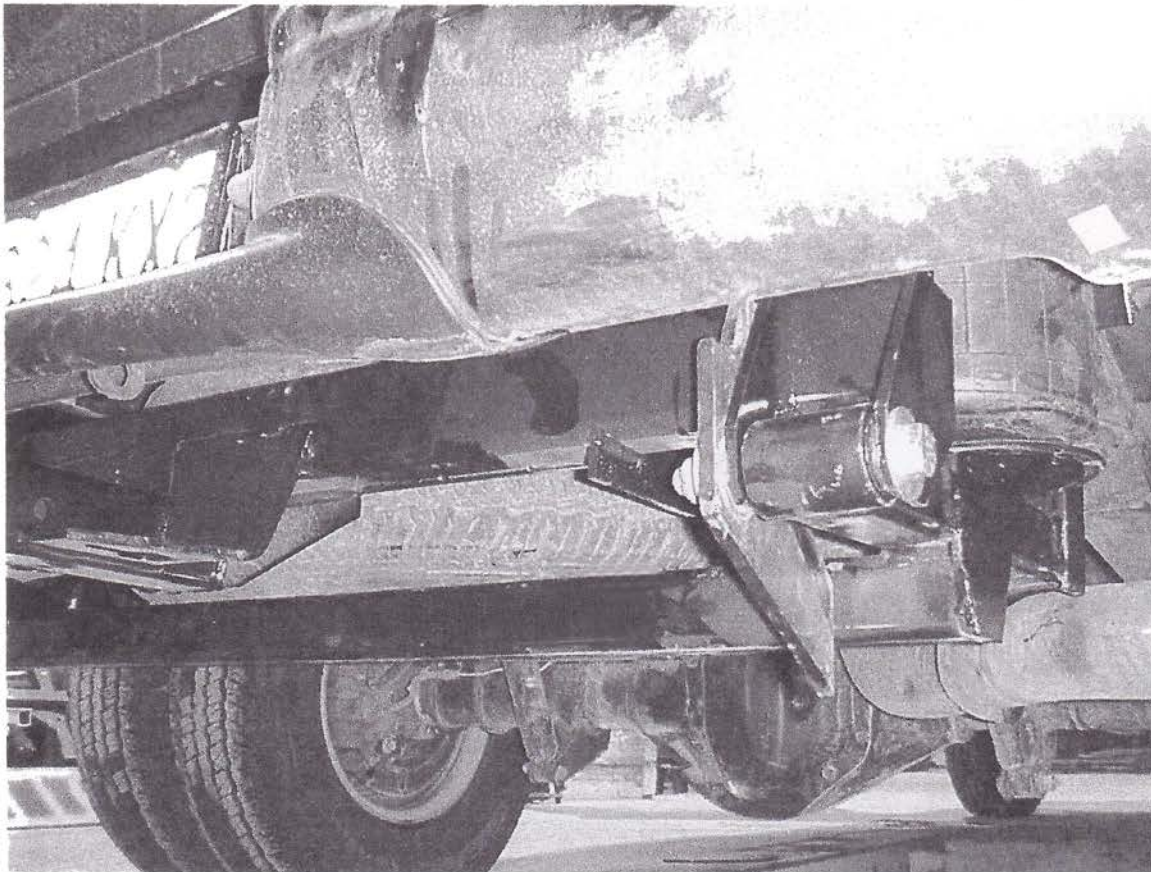
Step 13. Check all fasteners to be sure they are tightened properly.



Step 14. Replace the spare tire and the carrier bracket.

Step 15. Check the air bags to be sure they are not exposed to any sharp object or other components that could cause wear and or damage.

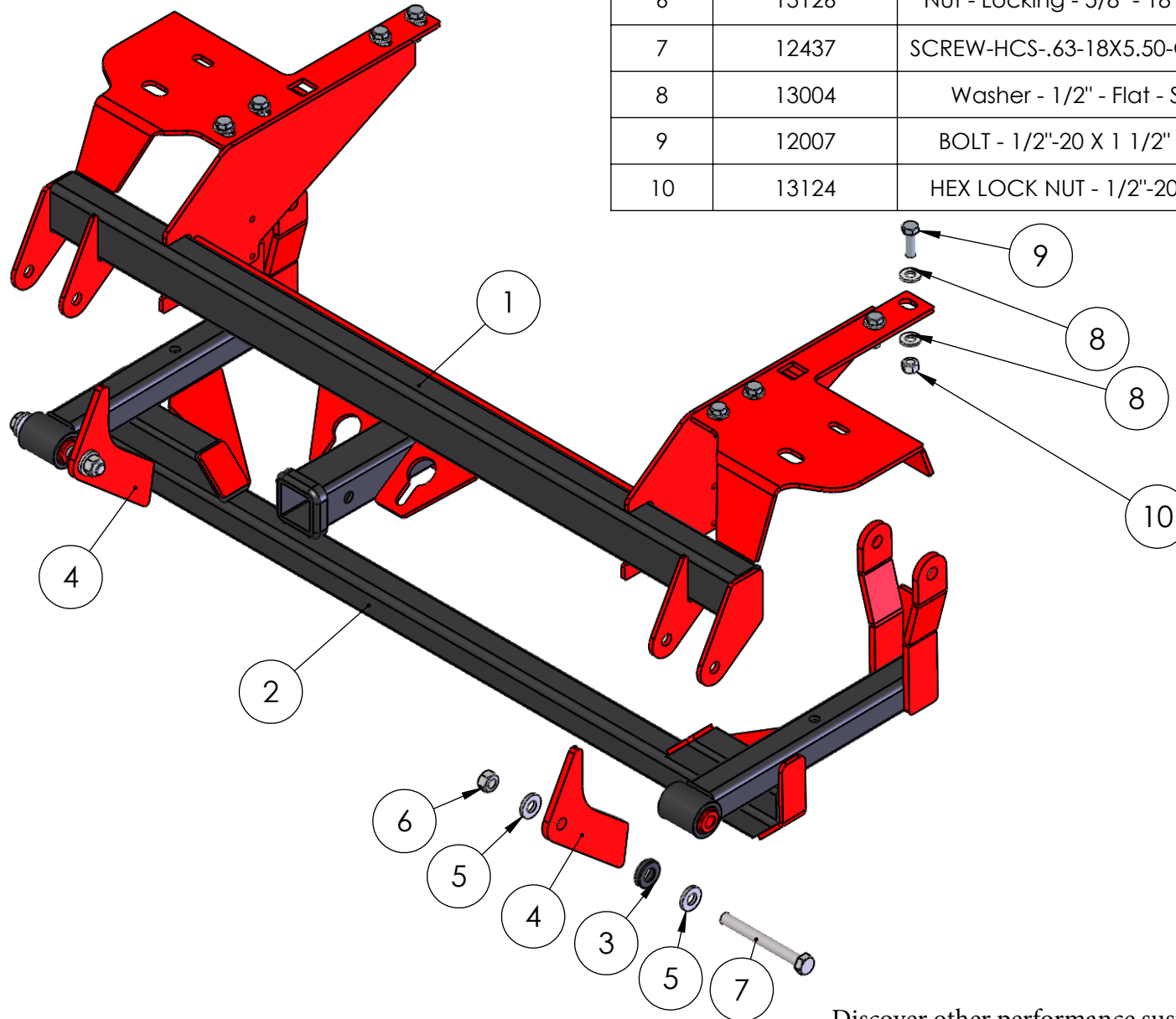
Step 16. Run bottom of Air Ride/Air Bag reasonably level with ground at all times.



KIT - 10770

99-04 F250-350 2-Bar Rear

ITEM NO.	PART NUMBER	DESCRIPTION	Default(PM)/QTY.
1	10771	Top Frame	1
2	10772	Swing Arm	1
3	10784	WASHER - LIMITER SPACER	2
4	14597	2-Bag Limiter	2
5	13006	5/8" FLAT WASHER	4
6	13126	Nut - Locking - 5/8" - 18 - GR8	2
7	12437	SCREW-HCS-.63-18X5.50-GR8-YZ	2
8	13004	Washer - 1/2" - Flat - SAE	16
9	12007	BOLT - 1/2"-20 X 1 1/2" GR8	8
10	13124	HEX LOCK NUT - 1/2"-20 GR8	8



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