



INSTALLATION INSTRUCTIONS

PART NUMBER - SS1575 / SS1574



PARTS LIST

- 2 - Front Towers - Assembled
- 2 - Front Bell Shackle - Assembled
- 2 - Rear Boomerang Shackle - Assembled
- 1 - Front Crossmember
- 2 - Front Bump Stop Extension
- 2 - Rear Bump Stop Extension
- Hardware
- Installation Instructions

RECOMMENDED TOOLS

- Jackstands
- Hydraulic Jack
- Pry Bar
- Large Hammer
- Penetrating Lubricant (spray)

PLEASE READ ENTIRE INSTRUCTIONS PRIOR TO INSTALLATION

ALL BUSHINGS MUST BE COATED IN GREASE PRIOR TO INSTALLATION. FAILURE TO DO SO WILL CAUSE THE SUSPENSION TO SQUEAK UPON MOVEMENT!

FRONT INSTALLATION

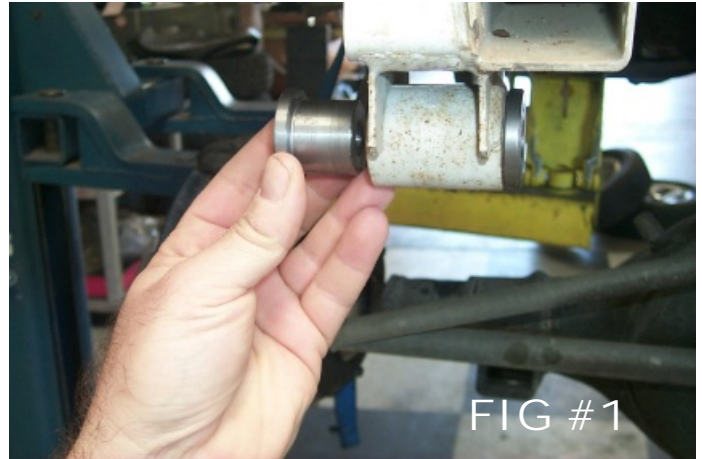
1. REMOVE FRONT BUMPER FROM VEHICLE. USING A HYDRAULIC JACK, LIFT THE FRONT OF THE FRAME UNTIL THE SUSPENSION DROPS AND THE TIRES HAVE LIFTED APPROXIMATELY 2" OFF OF THE GROUND. SECURE FRAME WITH JACK STANDS.

2. LOOSEN AND REMOVE BOLTS SECURING THE FRONT SHACKLES. ONCE THE SHACKLES ARE REMOVED, THE FRONT END WILL DROOP UNTIL THE TIRES HIT THE GROUND. NEXT, REMOVE THE BOLT ON THE REAR OF THE FRONT SPRING TO ALLOW THE ENTIRE FRONT AXLE AND SPRING ASSEMBLY TO HANG FREELY FROM THE SHOCK. NOTE: IF YOU ARE UPGRADING TO CALMINI SHOCKS, PROCEED TO SWAP OUT THE SHOCKS FROM EACH SIDE BEFORE PROCEEDING.

3. LOCATE THE FRONT TOWER ASSEMBLIES. SET THEM SIDE BY SIDE WITH THE DOUBLE NOTCHED SIDE FACING IN. ONCE INSTALLED, THE NOTCHED SIDES WILL FACE THE CENTER OF THE VEHICLE. REMOVE INSTALLED HARDWARE AND CORRESPONDING BUSHINGS TAKING NOTE AS TO THEIR ORIENTATION IN THE TOWER. USING THE STEEL SPACERS INSTALL INTO THE FACTORY PIVOT POINT ON THE FRAME (FIG #1). THE STOCK BUSHINGS CAN THEN BE REMOVED FROM THE FRONT EYE OF THE FRONT SPRINGS AND REPLACED WITH THE BUSHINGS INCLUDED WITH THE TOWER. FROM HERE, SLIDE TOWER OVER THE FRAME HORN AND INTO POSITION (FIG #2 - PASSENGER SIDE SHOWN). THE STEEL SPACER SHOULD LINE BACK UP INSIDE THE TOWER AND THE BOLT CAN BE RE-INSTALLED. ALSO SECURE TOWER TO THE FRAME USING THE SUPPLIED 3/8" BOLTS ON THE TOP OF THE FRAME. HAND TIGHTEN ALL HARDWARE AT THIS TIME. REPEAT THIS STEP FOR THE DRIVER SIDE TOWER AS WELL.

4. ONCE THE FRONT TOWERS ARE SECURED, PROCEED TO THE REAR OF THE FRONT SPRING. THE FLARED OR "BELL" SHAPED SHACKLE INSTALLS IN THIS LOCATION. REMOVE FACTORY BUSHING FROM THE REAR EYE OF THE FRONT SPRING AND INSTALL SUPPLIED POLYURETHANE BUSHINGS INSTALLED IN THE SHACKLE. SLIDE THE UPPER PORTION OF THE FLARED SHACKLE INTO THE STOCK SPRING HANGER AND SECURE IN PLACE WITH SUPPLIED HARDWARE. ONCE SNUG, INSTALL THE REAR EYE OF THE SPRING INTO THE FLARED SHACKLE AS SHOWN IN FIG #3. SNUG ALL BOLTS SECURING THE SPRING AND THE SHACKLE TO THE FRAME. PROCEED TO THE FRONT OF THE SPRING AND INSTALL INTO THE LOWER PORTION OF THE FRONT TOWER. ONCE COMPLETED, THE ASSEMBLY SHOULD APPEAR AS SHOWN IN FIG #4

5. LOCATE AND INSTALL FRONT CROSSMEMBER BETWEEN THE TWO FRONT TOWERS USING THE INSTALLED TOWER HARDWARE.



ONCE THE CROSSMEMBER IS INSTALLED, ALL HARDWARE MUST BE TIGHTENED TAKING INTO CONSIDERATION NOT TO OVER-TIGHTEN THE UPPER BELL SHACKLE BOLTS AS THEY CAN BIND.

6. USING THE SUPPLIED PRE-PUNCHED FRONT BUMP STOP (GOLD BLOCK) AND SUPPLIED HARDWARE, ATTACH THE FACTORY BUMP STOP TO THE EXTENSION PIECE AND RE-INSTALL TO THE FRAME OF THE SAMURAI. FAILURE TO INSTALL THE FRONT BUMP STOP EXTENSIONS WILL VOID THE WARRANTY ON THE SUSPENSION.

6. ONCE THE FRONT SUSPENSION HAS BEEN COMPLETED AND ALL HARDWARE PROPERLY SECURED, THE STOCK BUMPER (OR AFTERMARKET UNIT) CAN BE RE-INSTALLED. MINOR TRIMMING WILL BE REQUIRED ON THE ON THE STOCK BUMPER TO CORRECTLY CLEAR THE FRONT TOWERS.

REAR SUSPENSION

1. USING A HYDRAULIC JACK LIFT THE REAR OF THE VEHICLE APPROXIMATELY 2" OFF OF THE GROUND AND SUPPORT THE FRAME WITH JACK STANDS. LOOSEN AND REMOVE THE FACTORY BOLTS SECURING THE REAR SHACKLE TO THE FRAME AND SPRING. ONCE THE STOCK SHACKLE HAS BEEN REMOVED, REPLACE THE REAR FACTORY SPRING EYE BUSHINGS WITH THE SUPPLIED UNITS FROM THE BOOMERANG SHACKLE. ALSO INSTALL CORRESPONDING BUSHINGS INTO THE PIVOT POINT ON THE FRAME. THE BOOMERANG SHACKLE CAN THEN BE INSTALLED TO THE FRAME AND THE REAR SPRING EYE. ALL HARDWARE CAN BE SECURED.

2. THE SOLID REAR BUMP STOP EXTENSIONS ARE OPTIONAL PIECES THAT CAN BE SECURED TO THE VEHICLE. IF THE FACTORY SPRINGS ARE TOO WORN, RUNNING THIS BUMP STOP WILL LIMIT REAR ARTICULATION. IF YOU CHOOSE TO, THE BUMP STOP CAN BE TACK WELDED TO THE BUMP STOP STRIKE PLATE ON THE BOTTOM SIDE OF THE FRAME JUST ABOVE THE REAR AXLE.

3. THE SAMURAI CAN NOW BE SET ON ALL FOUR WHEELS. ALL HARDWARE SHOULD BE INSPECTED AND SECURED IF IT HAS NOT ALREADY BEEN DONE.

NOTE: THE STOCK SAMURAI SHOCKS WILL PERFORM CORRECTLY WITH THE SHACKLE REVERSE SYSTEM. WE DO OFFER PERFORMANCE SHOCKS FOR THE 2" LIFT. PLEASE CALL THE SALES OFFICE FOR DETAILS.



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