12298 Installation Instructions

A pair of safety glasses should be worn at all times while installing this product.

MAKE:	MODEL:	STYLE:
SUBARU	LEGACY	SEDAN

WARNING: NEVER EXCEED YOUR VEHICLE MANUFACTURER'S RECOMMENDED TOWING CAPACITY

WEIGHT CARRYING:

3,500 LBS TRAILER WEIGHT
350 LBS TONGUE WEIGHT

WARNING:

WE STRONGLY RECOMMEND THE USE OF AUXILIARY STABILIZING STRAPS FOR ALL NON-TRAILER (WHEEL-LESS) LOADS. PLEASE SEE THE CURT CATALOG OR VISIT US ONLINE AT WWW.CURTMFG.COM FOR FURTHER INFORMATION.

INSTALLATION TIME: 60 MIN.

THE INSTALL TIME LISTED IS FOR PROFESSIONAL INSTALLERS. IF YOU ARE HESITANT TO UNDERTAKE THIS TASK ON YOUR OWN, CONTACT AN AUTHORIZED CURT INSTALLER FOR ADDITIONAL ASSISTANCE.

INSTALLATION REQUIRES:


SPRAY LUBRICANT


PRY BAR


WIRE


RATCHET


8" SOCKET EXTENSION


10mm 3/4" SOCKET


MARKER


AVIATION SHEARS


DIE GRINDER


POWER DRILL


DRILL BIT 17/32"

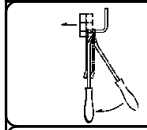
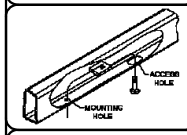
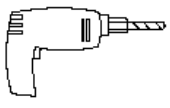

TORQUE WRENCH

INSTALLATION TIPS:

1.) *BEFORE YOU BEGIN INSTALLATION, READ ALL INSTRUCTIONS THOROUGHLY.*
2.) *TO EASE INSTALLATION, 2 PEOPLE MAY BE REQUIRED.*
3.) *USING PROPER TOOLS WILL GREATLY IMPROVE THE QUALITY OF THE INSTALL AND REDUCE THE TIME REQUIRED.*
4.) *NEED HELP OR HAVE SOME QUESTIONS? CALL TECHNICAL SUPPORT AT 800.798.0813*

LEVEL OF DIFFICULTY: HARD

EASY / ***MODERATE*** / ***HARD***

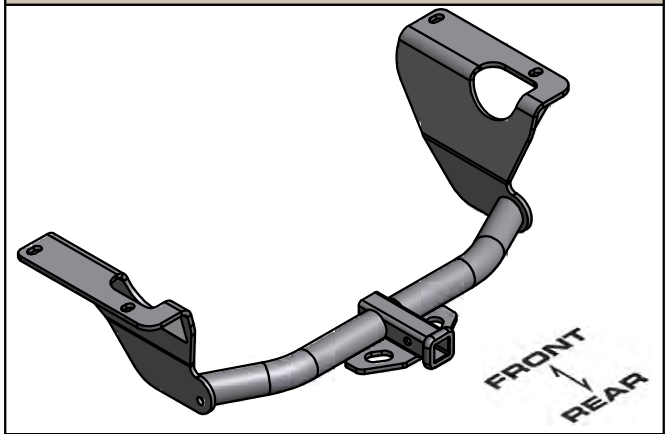
	MUST REMOVE (3) REARMOST EXHAUST HANGERS
	MUST ENLARGE HOLES FOR FASTENERS IN FRAME RAILS
	MUST FISHWIRE (4) 1/2" FASTENERS INTO FRAME RAILS
	MUST TRIM HEAT SHIELD FOR HITCH CLEARANCE
	MUST DRILL (2) HOLES INTO FRAME RAILS

VEHICLE PHOTO:



REPRESENTATIVE PHOTO

HITCH ILLUSTRATION:



MAKE SURE YOUR HITCH MATCHES

PERIODICALLY CHECK THIS RECEIVER HITCH TO ENSURE ALL FASTENERS ARE TIGHT AND ALL STRUCTURAL COMPONENTS ARE SOUND

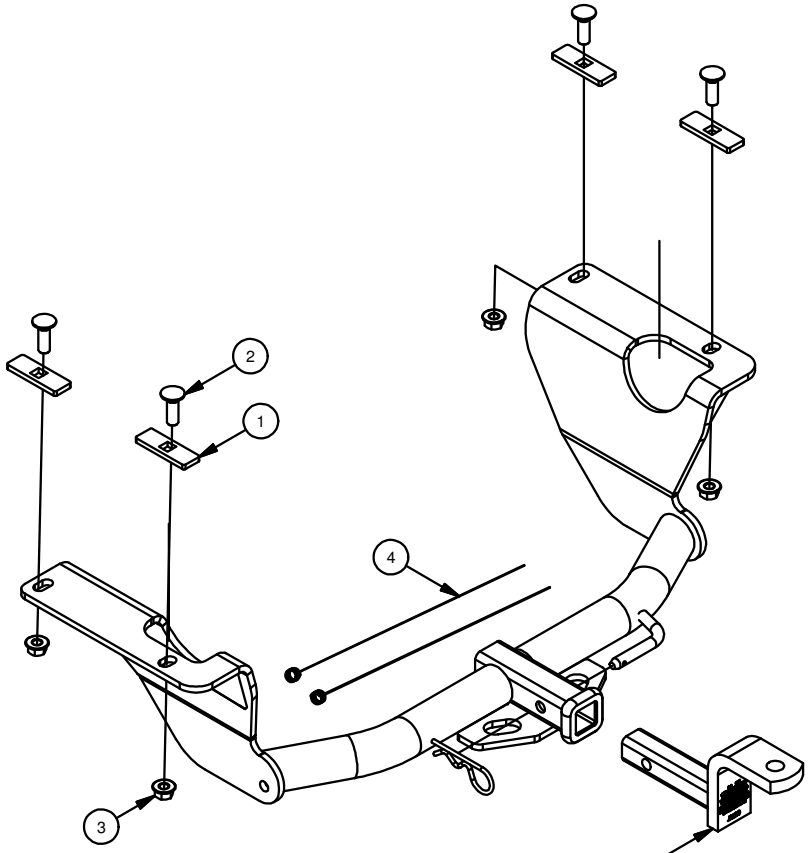
CURT Manufacturing Inc. warrants this product to be free of defects in material and/or workmanship at the time of retail purchase by the original purchaser. If the product is found to be defective, Curt Manufacturing Inc. may repair or replace the product at their option, when the product is returned, prepaid, with proof of purchase. Alteration to, misuse of, or improper installation of this product voids the warranty. Curt Manufacturing Inc.'s liability is limited to repair or replacement of products found to be defective, and specifically excludes liability for incidental or consequential loss or damage.

For more information log onto www.curtmfg.com, & for helpful towing tips log onto www.hitchinfo.com

10/5/2012

INSTALLATION WALKTHROUGH:

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	CM-SP6	.250 x 1.00 x 3.00" SQUARE HOLE SPACER
2	4	1/2-13 x 1 1/2	CARRIAGE BOLT
3	4	HFN 1213	HEX FLANGE NUT
4	2	1_2 FISHWIRE	1/2" FISHWIRE



DESIGNED FOR USE WITH
BALL MOUNT # D-55001 / 45501



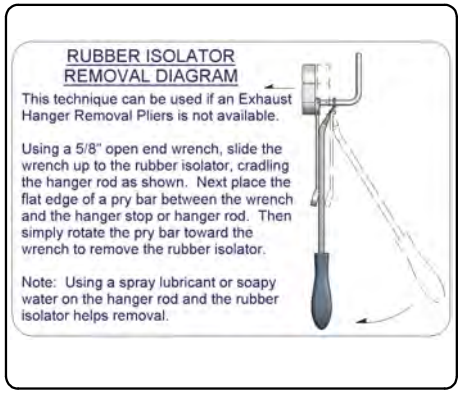
1. Remove (2) rearmost rubber isolators from exhaust muffler. One isolator is located towards outside of vehicle and one is located towards inside of vehicle.





2. Remove (1) rubber isolator from exhaust tube forward of muffler.





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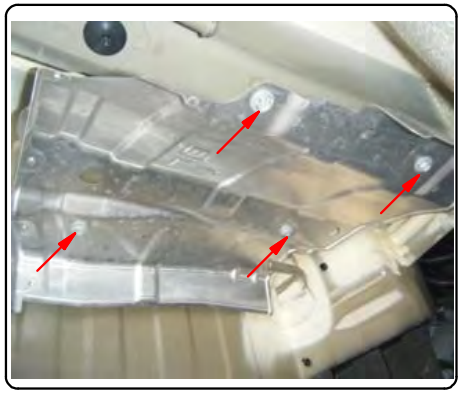
INSTALLATION WALKTHROUGH:

3. Use wire to tie up exhaust and prevent damage to exhaust tube.



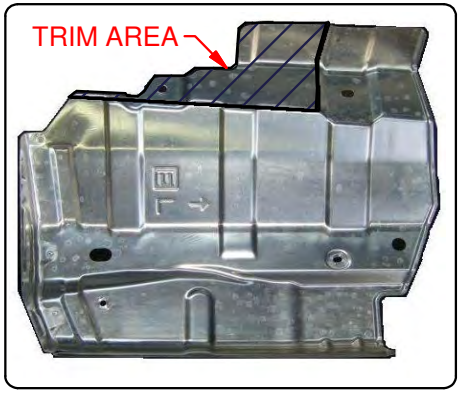


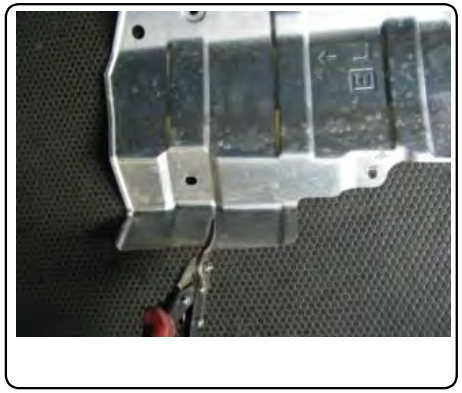
4. Remove (4) screws from vehicle heat shield with 10mm socket. Remove heat shield from vehicle. Save screws for reinstallation in Step 13. Save heat shield for trimming and reinstallation.





5. Trim heat shield with aviation shears according to diagram.





6. Remove (4) rubber plugs from frame rails. (2) plugs per frame rail. Discard plugs.



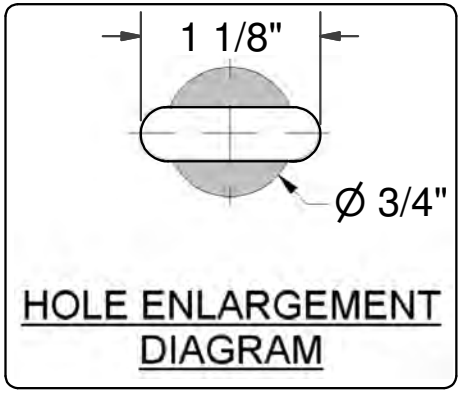


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INSTALLATION WALKTHROUGH:

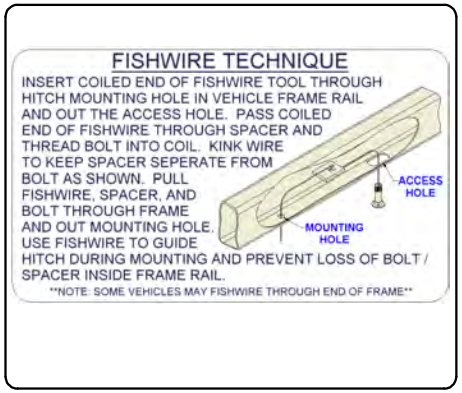
7. Enlarge front (2) holes where rubber plugs were removed in Step 6 with die grinder. Enlarge only enough to allow CM-SP6 spacers and 1/2" carriage bolts to pass through.





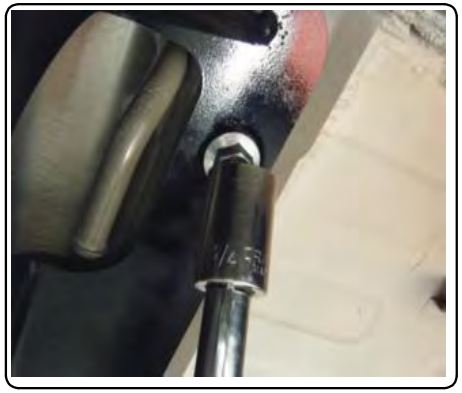
8. Fishwire 1/2" carriage bolts and CM-SP6 spacers through enlarged holes and out rear mounting holes using supplied fishwire tools.



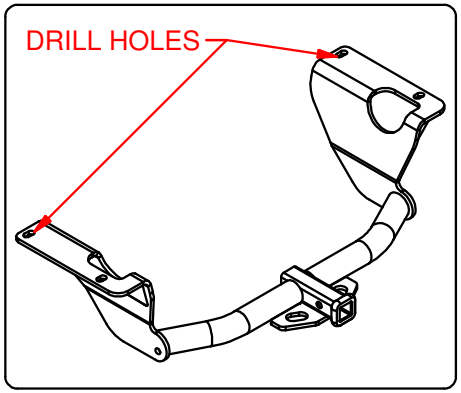


9. Raise hitch into position and secure hitch to vehicle with 1/2" hex flange nuts on fishwired bolts from Step 8. Only hand tighten bolts at this time with 3/4" socket.





10. Center hitch on vehicle. Using the hitch as a template, drill front (2) holes in frame rails. Drill one hole per frame rail using a 17/32" drill bit



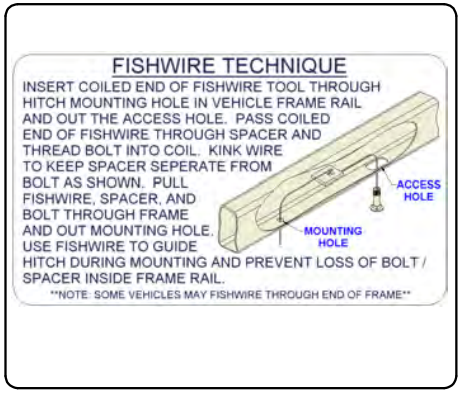


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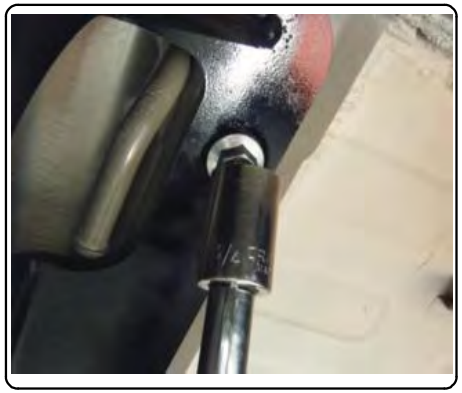
INSTALLATION WALKTHROUGH:

11. Fishwire 1/2" carriage bolts and CM-SP6 spacers through enlarged holes and out front mounting holes using supplied fishwire tools.





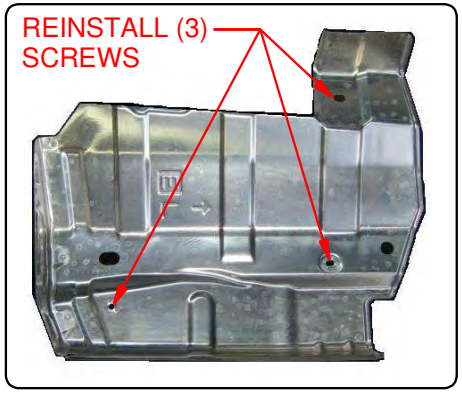
12. Secure hitch to vehicle with 1/2" hex flange nuts on fishwired bolts from Step 11. Only hand tighten bolts at this time with 3/4" socket.





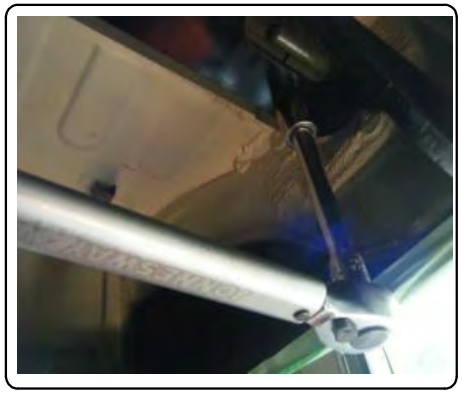
13. Reinstall trimmed heat shield with (3) screws saved from Step 4. Use 10mm socket to tighten heat shield screws.





14. Torque 1/2" hardware to 110 lb-ft.





For more information log onto www.curtmfg.com, & for helpful towing tips log onto www.hitchinfo.com

INSTALLATION WALKTHROUGH:

14. Reattach (2) rubber isolators on vehicle muffler.





16. Reattach (1) rubber isolators on vehicle exhaust tube forward of muffler. Remove wire previously holding up exhaust.

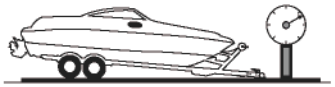




TOWING SAFETY INFORMATION

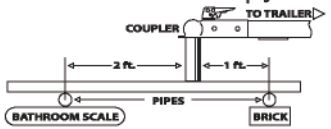
Gross Trailer Weight / GTW

The Gross Trailer Weight is the weight of the trailer & cargo.
Measure this by putting the fully loaded trailer on a vehicle scale.



Tongue Weight / TW

The downward force that is exerted on the hitch ball by the coupler. The tongue weight will vary depending on where the load is positioned in relationship to the trailer axle(s). To measure the tongue weight, use either a commercial scale or a bathroom scale with the coupler at towing height. When using a bathroom scale with heavier tongue weights, use the method shown and multiply the scale reading by 3.



Weight Carrying / WC

The total weight of both the trailer and the cargo inside.
Never exceed the weight capacity of your trailer hitch.

Weight Distribution / WD

Used to balance the weight of the cargo between the front and rear wheels throughout the trailer, allowing for better steering, braking, and level riding.



Sway Control

A device used to reduce the lateral movements of the trailer that are caused by the wind. This works in conjunction with a weight distribution hitch. Do not use this on a class 1 or 2 hitch, or with surge brakes.

How Much Can You Safely Tow?

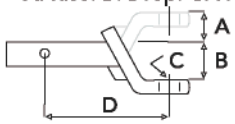
TONGUE WEIGHT lbs	1000	2000	3000	4000	5000	6000	7000	8000	10,000	12,000
Tongue weight should be about 10 to 15 percent of the gross trailer weight.	CLASS 1									
	CLASS 2									
	CLASS 3									
	CLASS 4									
TRAILER TYPE	CLASS 5									
Camper	11'	12'	13'	14'	15'	16'				
lbs	1100	1200	1300	1400	1500	1600				
Vacation	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'
lbs	2100	2400	2700	3000	3300	3600	3900	4200	4500	4800
Vacation	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'
lbs	2800	3200	3600	4000	4400	4800	5200	5600	6000	6400
5th Wheel										

Refer to owner's manual for towing capabilities and limitations.

Ball Mount

The ball mount is placed inside the opening of the receiver hitch which is mounted to the vehicle. Make sure a hitch pin and clip is properly securing the ball mount to the receiver hitch before you begin towing.

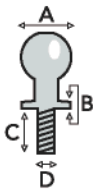
- **A**: Rise. **B**: Drop. **C**: Hole Size. **D**: Length.



Trailer Ball

The connection from the hitch to the trailer. There are many factors that determine the correct hitch ball:

- Number one is the hitch ball's gross trailer weightrating.
- The mounting platform must be at least 3/8" thick.
- The hole diameter must not be more than 1/16" larger than the threaded shank.
- Every time you tow, check the nut and lock washer to make sure they are fastened securely.
- **A**: Ball Dia. **B**: Shank Dia. **C**: Shank Length. **D**: Shank Rise.



Coupler

The component that is placed over the trailer ball to connect the vehicle to the trailer. Be sure that the coupler size matches the size of the hitch ball and that the coupler handle is securely fastened. To determine what size hitch ball you need for your application you will need to know the size of coupler that is on the trailer. Be sure your coupler is properly adjusted to the ball you are using.
NOTE: For added security the use of safety devices such as Coupler Safety Pins and Locks is strongly recommended.

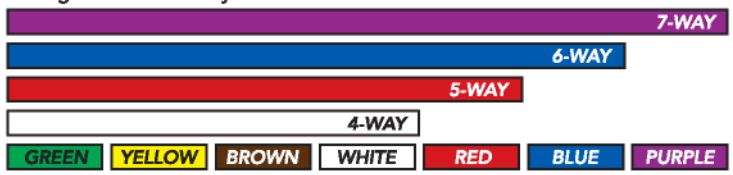
Safety Chains

Safety chains are a requirement and should be crossed under the tongue of the trailer so that the tongue will not drop to the road if it becomes separated from the hitch. Always leave enough slack so you can turn. Never allow the safety chains to drag on the ground and never attach the chains to the bumper.
Trailer Classification: Safety Chain Breaking Force - Minimum
Class 1: 2,000 lbs. (8.9 kN)
Class 2: 3,500 lbs. (15.6 kN)
Class 3: 5,000 lbs. (22.2 kN)
The strength rating of each length of safety chain or its equivalent and its attachments shall be equal to or exceed in minimum breaking force the GVWR (Gross Vehicle Weight Rating) of the trailer.

Electrical

Trailer lights, Electric Brakes, Break-away systems - Every time you tow, be sure to check that all components are working properly.

Wiring identification by color:



12298 SUBARU LEGACY

10/5/2012

GROSS LOAD CAPACITY WHEN USED AS A WEIGHT CARRYING HITCH: 3,500 LBS. TRAILER WEIGHT & 350 LBS. TONGUE WEIGHT.

*****DO NOT EXCEED VEHICLE MANUFACTURER'S RECOMMENDED TOWING CAPACITY.*****

WARNING: ALL NON-TRAILER LOADS APPLIED TO THIS PRODUCT MUST BE SUPPORTED BY AUXILIARY STABILIZING STRAPS.

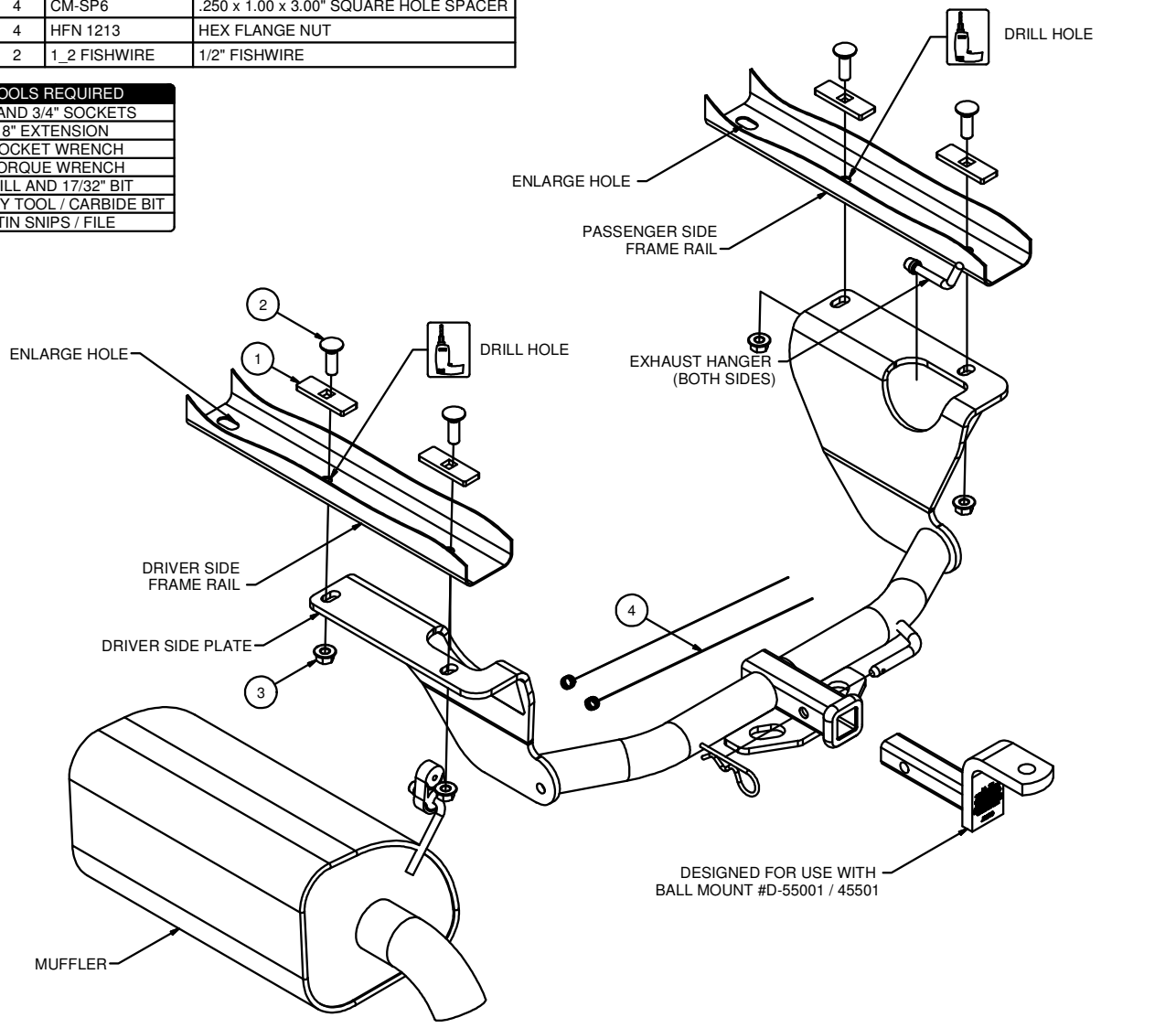
**** FAILURE TO PROPERLY SUPPORT NON-TRAILER LOADS WILL VOID PRODUCT WARRANTY****

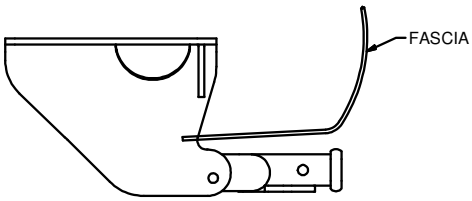
HAVING INSTALLATION QUESTIONS? CALL TECHNICAL SUPPORT AT 1-800-798-0813

Parts List

ITEM	QTY	PART NUMBER	DESCRIPTION
2	4	1/2-13 x 1 1/2	CARRIAGE BOLT
1	4	CM-SP6	.250 x 1.00 x 3.00" SQUARE HOLE SPACER
3	4	HFN 1213	HEX FLANGE NUT
4	2	1_2 FISHWIRE	1/2" FISHWIRE

TOOLS REQUIRED
10 AND 3/4" SOCKETS
8" EXTENSION
SOCKET WRENCH
TORQUE WRENCH
DRILL AND 17/32" BIT
ROTARY TOOL / CARBIDE BIT
TIN SNIPS / FILE





INSTALLED HITCH POSITION



HITCH WEIGHT: 36 LBS.

INSTALL TIME

PROFESSIONAL: 45 MINUTES

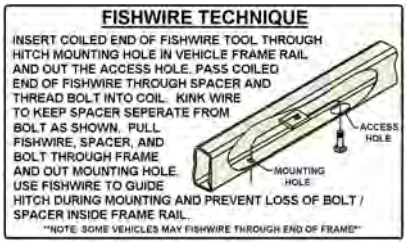
NOVICE (DIY): 90 MINUTES

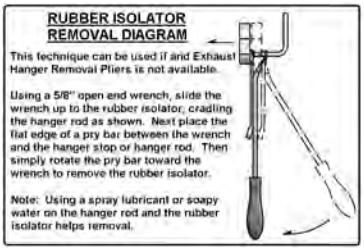
INSTALL NOTES:

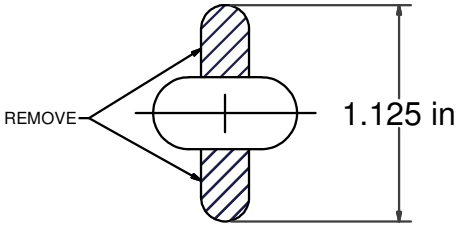
- DRILLING REQUIRED
- FISHWIRE HARDWARE
- LOWER EXHAUST
- TRIM HEAT SHIELD

PERIODICALLY CHECK THIS RECEIVER HITCH TO ENSURE THAT ALL FASTENERS ARE TIGHT AND THAT ALL STRUCTURAL COMPONENTS ARE SOUND.

Curt Manufacturing Inc., warrants this product to be free of defects in material and/or workmanship at the time of retail purchase by the original purchaser. If the product is found to be defective, Curt Manufacturing Inc., may repair or replace the product, at their option, when the product is returned, prepaid, with proof of purchase. Alteration to, misuse of, or improper installation of this product voids the warranty. Curt Manufacturing Inc.'s liability is limited to repair or replacement of products found to be defective, and specifically excludes liability for incidental or consequential loss or damage.







HOLE ENLARGEMENT DIAGRAM



HEAT SHIELD TRIM DIAGRAM

INSTALLATION STEPS

1. Lower the exhaust by removing two (2) rubber exhaust isolators per muffler and one (1) isolator per exhaust tube from the frame mounted hangers. (See RUBBER ISOLATOR REMOVAL DIAGRAM.)
2. Tie up exhaust with wire high enough to avoid damaging exhaust tubes.
3. Remove the muffler heat shield(s) by removing four (4) screws per heat shield. Save screws for reinstallation in Step 14. Save heat shield for trimming and reinstallation.
4. Trim heat shield to clear hitch side plates. (See HEAT SHIELD TRIM DIAGRAM.)
5. Remove two (2) rubber plugs from each frame rail.
6. Enlarge front hole in each frame rail to allow the 1/2" carriage bolt and CM-SP6 spacer to be inserted into frame rail. (See HOLE ENLARGEMENT DIAGRAM.)
7. Fishwire 1/2" carriage bolts and CM-SP6 spacers through enlarged holes and out rear mounting holes in each frame rail, as shown. (See FISHWIRE TECHNIQUE diagram.)
8. Raise the hitch into position.
9. Center the hitch on vehicle and loosely secure hitch to vehicle with 1/2" hex flange nuts, as shown.
10. Using hitch as a template, mark and drill front holes in frame rails.
11. Fishwire 1/2" carriage bolts and CM-SP6 spacers through enlarged holes and out drilled holes.
12. Secure 1/2" hardware from Step 11 with 1/2" hex flange nuts, as shown.
13. Torque 1/2" hardware to 110 lb-ft.
14. Reinstall the heat shield with screws saved from Step 3.
15. Raise the exhaust and reinstall rubber isolators.

PERIODICALLY CHECK THIS RECEIVER HITCH TO ENSURE THAT ALL FASTENERS ARE TIGHT AND THAT ALL STRUCTURAL COMPONENTS ARE SOUND.

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