

Installation Instructions

PART NUMBERS: 24965, 77965, CQT24965

! WARNING

To prevent SERIOUS INJURY, DEATH or PROPERTY DAMAGE:

- **ALWAYS read, understand and follow warnings and instructions for your hitch BEFORE installation. Keep for future reference.**
- **DO NOT cut, weld or modify this receiver.**
- **CHECK all fasteners are tight and your hitch is securely mounted to your vehicle periodically.**
- **ALWAYS read, understand and follow all warnings and instructions for your vehicle and for other accessories you will use with your hitch BEFORE use.**
- **LOAD the trailer heavier in front.**
- **DO NOT exceed lower of towing vehicle manufacturer’s rating or:**

Hitch Type	Max Gross Trailer Weight	Max Tongue Weight
Weight Carrying	2000 lb. (908 kg)	200 lb. (90.8 kg)
Weight Distributing	X	X

- **ALWAYS wear your seatbelt.**
- **SLOW DOWN when towing, NEVER exceed any posted speed limit.**
- **If EXCESS SWAY occurs, take your foot off the gas pedal and hold the steering wheel as steady as possible. DO NOT apply your brakes and DO NOT speed up.**

LIMITED LIFETIME WARRANTY

1. **Limited Lifetime Warranty (“Warranty”).** Horizon Global (“We”, “Us” or “Our”) warrants to the original consumer purchaser only (“You” or “Your”) that the product will be free from material defects in both material and workmanship, ordinary wear and tear excepted. The Warranty is valid only if (a) the products are returned to Us for inspection and testing; (b) Our inspection discloses to Our satisfaction that any alleged nonconformance are material and have not been caused by misuse, neglect, wear and tear, improper installation, unsuitable storage, improper repair, alteration, or accident; and (c) the products were installed, maintained and used in accordance with Our instructions. **THE WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED (OTHER THAN THE WARRANTY OF TITLE AS PROVIDED BY THE UNIFORM COMMERCIAL CODE IN EFFECT IN MICHIGAN), INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SAID WARRANTIES BEING EXPRESSLY DISCLAIMED.**
2. **Obligations of Purchaser.** Any returned product that is replaced by Us becomes our property. You may be responsible for return shipping costs. Please retain your purchase receipt to verify date of purchase and that You are the original consumer purchaser. The product and the purchase receipt must be provided to Us in order to process Your Warranty claim.
3. **Exclusive Remedy.** Product replacement is Your sole and exclusive remedy under this Warranty. We shall not be liable for service or labor charges incurred in removing or replacing a product. **IN NO EVENT WILL WE BE RESPONSIBLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES.**
4. **Assumption of Risk.** You acknowledge and agree that any use of the product for any purpose other than the specified use(s) stated in the product instructions is at Your own risk.
5. **Governing Law.** This Warranty gives You specific legal rights, and You also may have other rights which vary from state to state. This Warranty is governed by the laws of the State of Michigan, without regard to rules pertaining to conflicts of law. The state courts located in Oakland County, Michigan shall have exclusive jurisdiction for any disputes relating to this Warranty.

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Applications:

Years	Make	Models
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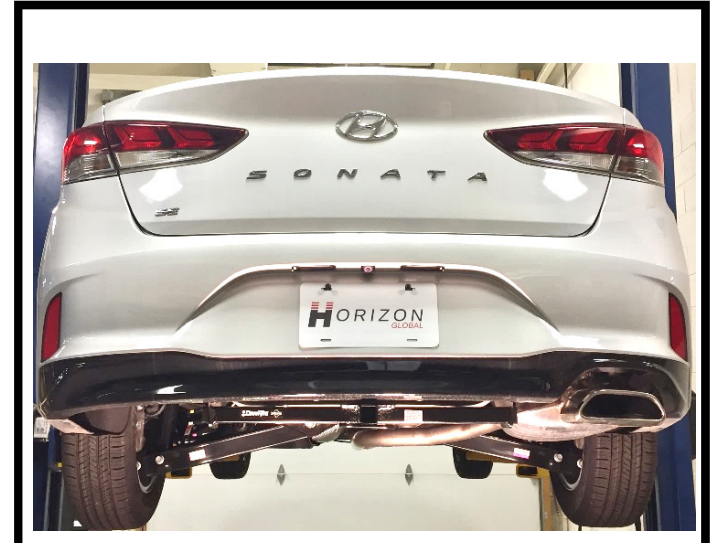
2011 - Current*	Kia	Optima
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2011 –Current*	Hyundai	Sonata
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*Visit our website for the most up to date information regarding application years and trim levels.

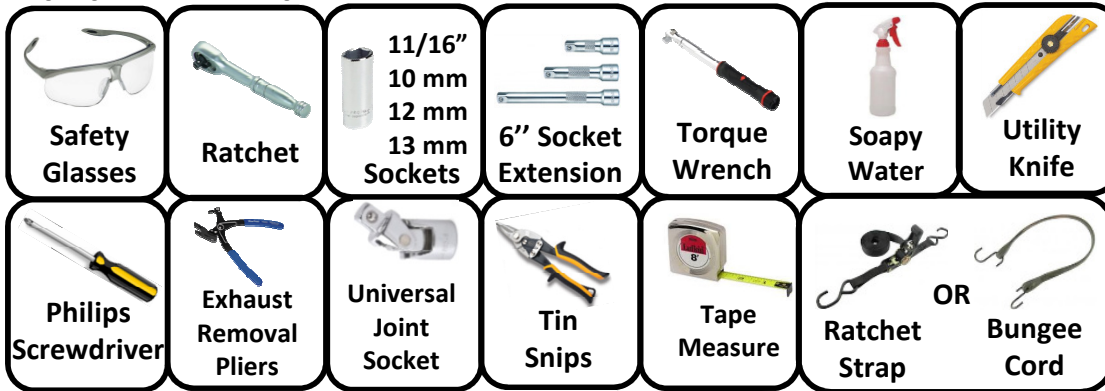
Installation Time: **40 min**

The time listed above is the average time for professional installers. If you do not feel comfortable performing this installation on your own or are in need of assistance, please contact a professional installer.



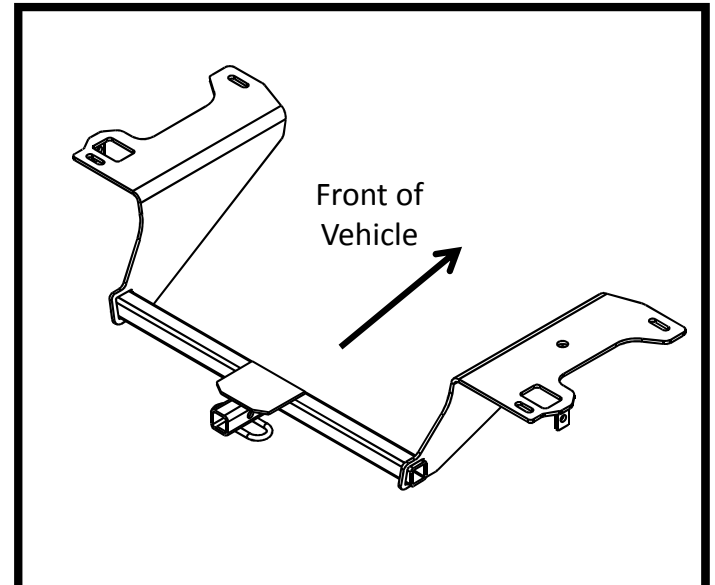
Representative Vehicle Photo

Equipment Required:



DO NOT EXCEED LOWER OF TOWING VEHICLE MANUFACTURER'S RATING OR:

Hitch Type	Max Gross Trailer Weight	Max Tongue Weight
Weight Carrying	2000 lb. (908 kg)	200 lb. (90.8 kg)
Weight Distributing	X	X



Hitch Illustration

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Fastener Kit: 24965F

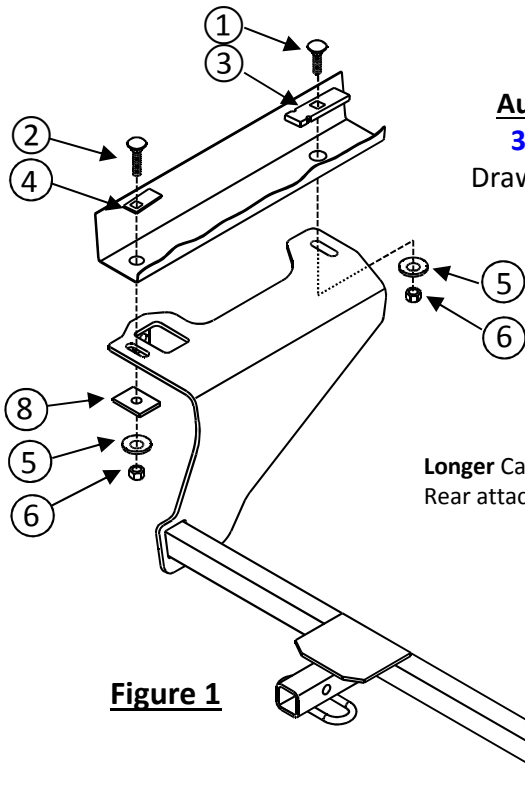


Figure 1

Authorized Drawbar Kit:
3593 (Sold Separately)

Drawbar must be used in the **RISE** position only.

Conical Washer
Teeth side
Against hitch

Figure 3

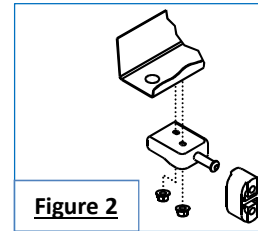


Figure 2

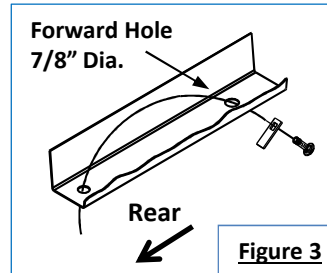


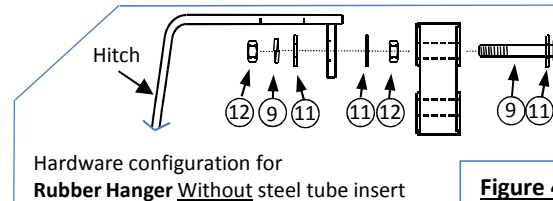
Figure 3

Longer Carriage Bolt
Rear attachment

Forward Hole
7/8" Dia.

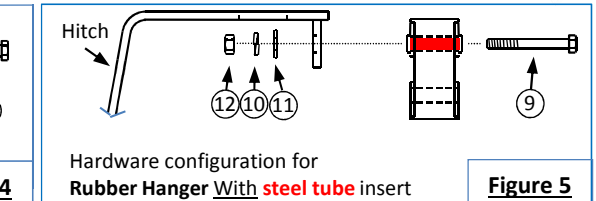
Rear

Always wear SAFETY GLASSES
when installing hitch



Hardware configuration for
Rubber Hanger Without steel tube insert

Figure 4



Hardware configuration for
Rubber Hanger With steel tube insert

Figure 5

Item #	Qty.	Description	Image
①	Qty. (2)	Carriage Bolt 7/16-14 x 1.25 Gr5	
②	Qty. (2)	Carriage Bolt 7/16-14 x 1.50 Gr5	
③	Qty. (2)	Special Washer .109" x .88 x 2.0 Part no. 1204	
④	Qty. (2)	Spacer Block 3/4 x 7/8 x 3.00 Part no. HE-2370-000	
⑤	Qty. (4)	Conical washer 7/16 Part no. 01292007	
⑥	Qty. (4)	Hex Nut 7-16-14 Gr2	
⑦	Qty. (4)	Flat Washer 7/16 Used as spacer, some models	
⑧	Qty. (2)	Spacer block 3/16 x 1.50 x 2.00 Part no. 04833001	
⑨	Qty. (2)	Bolt M8 X 1.25 X 65 CL10.9	
⑩	Qty. (2)	Lock Washer 5/16	
⑪	Qty. (6)	Flat Washer 5/16	
⑫	Qty. (4)	Hex Nut M8 X 1.25 CL10	
⑬	Qty. (4)	Pull Wire 7/16	

- Lower mufflers** – Lower muffler(s) removing the rearmost rubber hanger(s) and the rubber hanger near rear axle. A spray a lubricant on rubber hangers makes them slide off metal pins more easily.
NOTE: Be careful that exhaust is supported before removing rubber hangers. **See Figure 2.**
- Remove factory muffler hanger bracket(s)** - Remove (2) hex nuts per hanger bracket to remove. Return bracket(s) and fasteners to vehicle owner. **See Figure 2.**
- Remove drivers side plastic appearance panel (if present)** – Either return to vehicle owner or see **Figure 10** for optional trimming of panel.
- Remove plastic appearance panel (if present) covering space between bumper fascia and trunk pan** – Remove and return to vehicle owner.
- Remove heat shield(s)** – Remove the hex nuts (3 to 5 per heat shield) holding heat shield(s) to bottom of vehicle. See next page for heat shield trimming. **NOTE:** Shield(s) will be trimmed and replaced prior to installing hitch.
- Install rearmost attachment fasteners** - Using the 7/16 pull wires provided, install the 7/16 x 1.50 long carriage bolts and special washers (**item 3**) through the 7/8" diameter holes in bottom of frame, both sides. Pull carriage bolts down through 3/4" diameter holes toward rear of vehicle. **See Figure 3.**
- Install forward attachment fasteners** – Using the 7/16 pull wires provided, install the 7/16 x 1.25 long carriage bolts and spacer blocks (**item 4**) up through 7/8" diameter holes and back down through same hole, both sides.
- Trim heat shield(s)** - Trim heat shield(s), **See figures 7, 8, and 9 for details on how to trim muffler heat shield(s).**
- Reinstall heat shields** – Reinstall heat shields using same hardware removed.
- Raise hitch into position** - Install 7/16 conical toothed washers and hex nuts onto forward carriage bolt attachments. Install spacer blocks (**item 8**), 7/16 conical toothed washers and hex nuts onto **rearmost** carriage bolt attachments, **See Figure 1**. Be careful not to push bolts back into frame. **NOTE:** Insert 7/16" flat washers (**item 7**) as needed on rear attachments between hitch and frame to take up space for vehicles with raised area for muffler hangers. On dual exhaust vehicles, it may be necessary to push hitch towards the passenger side as far as possible so that hitch bracket is up against vehicle trunk pan. This allows more clearance for exhaust on Driver's side. Torque fasteners to specifications below.
- Trim Fascia** – On some models it may be necessary to trim a small notch in the fascia at the rear edge of hitch side bracket.
- Tighten all 7/16-14 fasteners with torque wrench to 50 Lb.-Ft. (68 N*M)**
▲ Proper torque is needed to keep the hitch secure to the vehicle when towing.
- Raise muffler(s) back into position** - Reattach rubber hangers as shown in Fig 4 or Fig 5. Tighten all M8 fasteners to proper torque specifications. **NOTE:** Hardware configuration varies by vehicle.
- Reinstall plastic appearance panel** – Using existing hardware, reinstall panel removed in Step 3 if trimming was preferred by vehicle owner.

Note: check hitch frequently, making sure all fasteners and ball are properly tightened. If hitch is removed, plug all holes in trunk pan or other body panels to prevent entry of water and exhaust fumes. A hitch or ball which has been damaged should be removed and replaced. Observe safety precautions when working beneath a vehicle and wear eye protection. Do not cut access or attachment holes with a torch. This product complies with safety specifications and requirements for connecting devices and towing systems of the state of New York, V.E.S.C. Regulation V-5 and SAE J684.

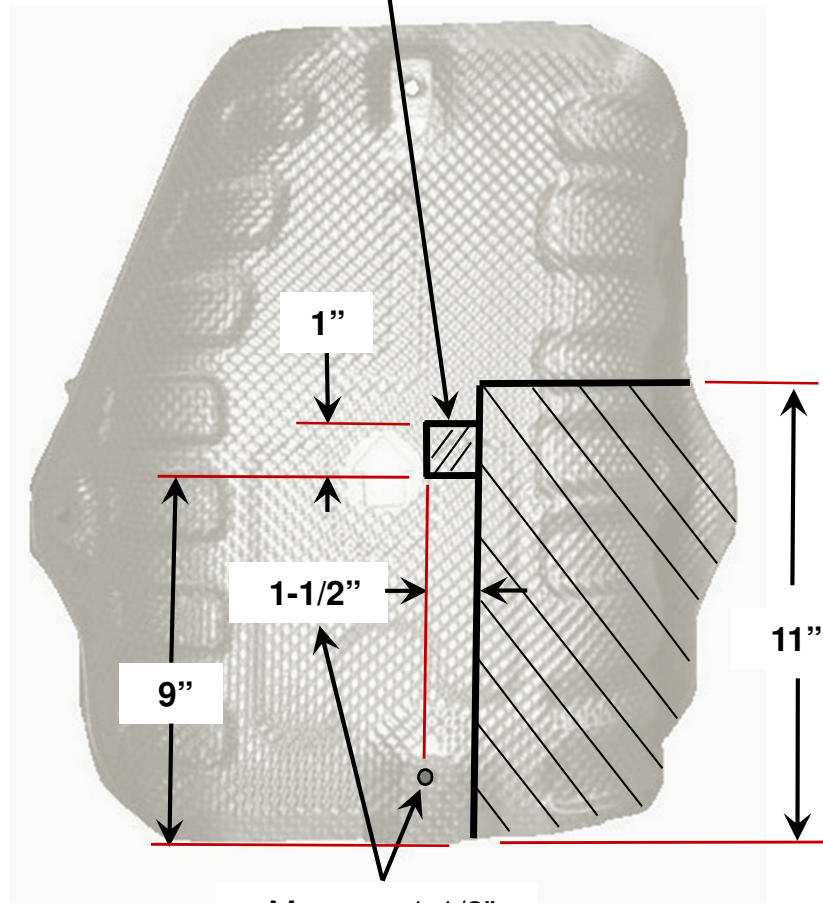
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Kia Optima
muffler heat shields

Figure 7

NOTE:
First, cut 1-1/2" wide x 1" tall area to fit around hitch bolt.



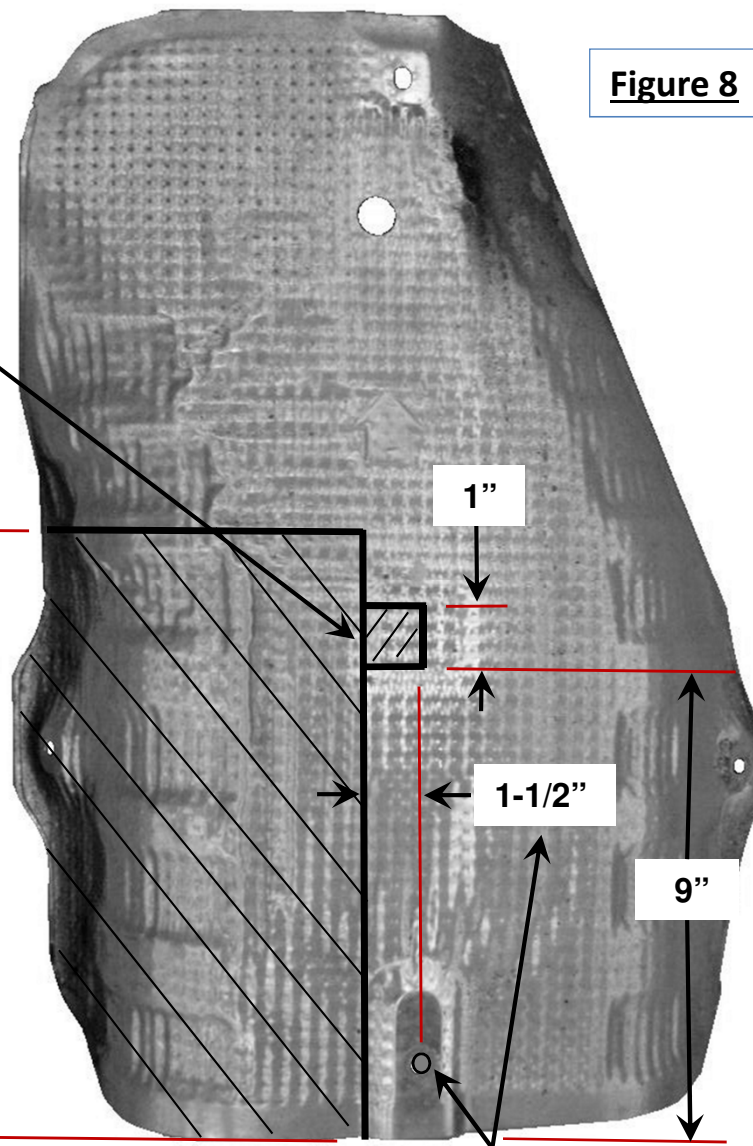
Measure 1-1/2"
from center of hole

Driver's side heat shield



Vehicle Forward

Figure 8

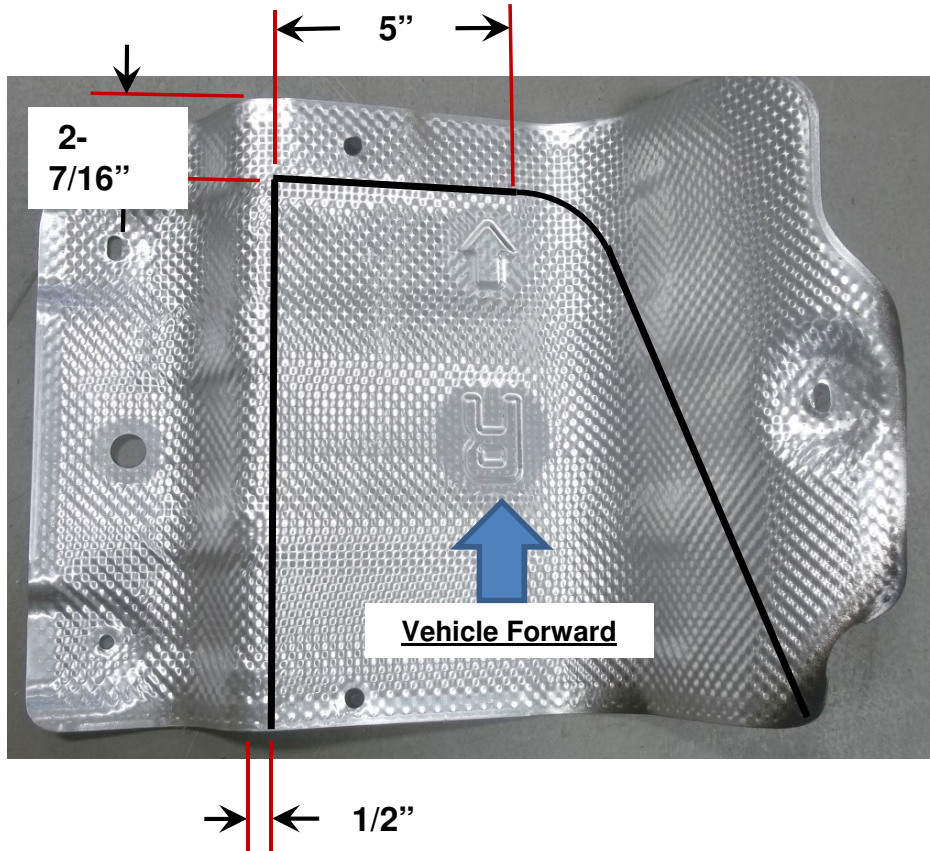


Measure 1-1/2"
from center of hole

Passenger's side muffler heat shield

Installation Instructions

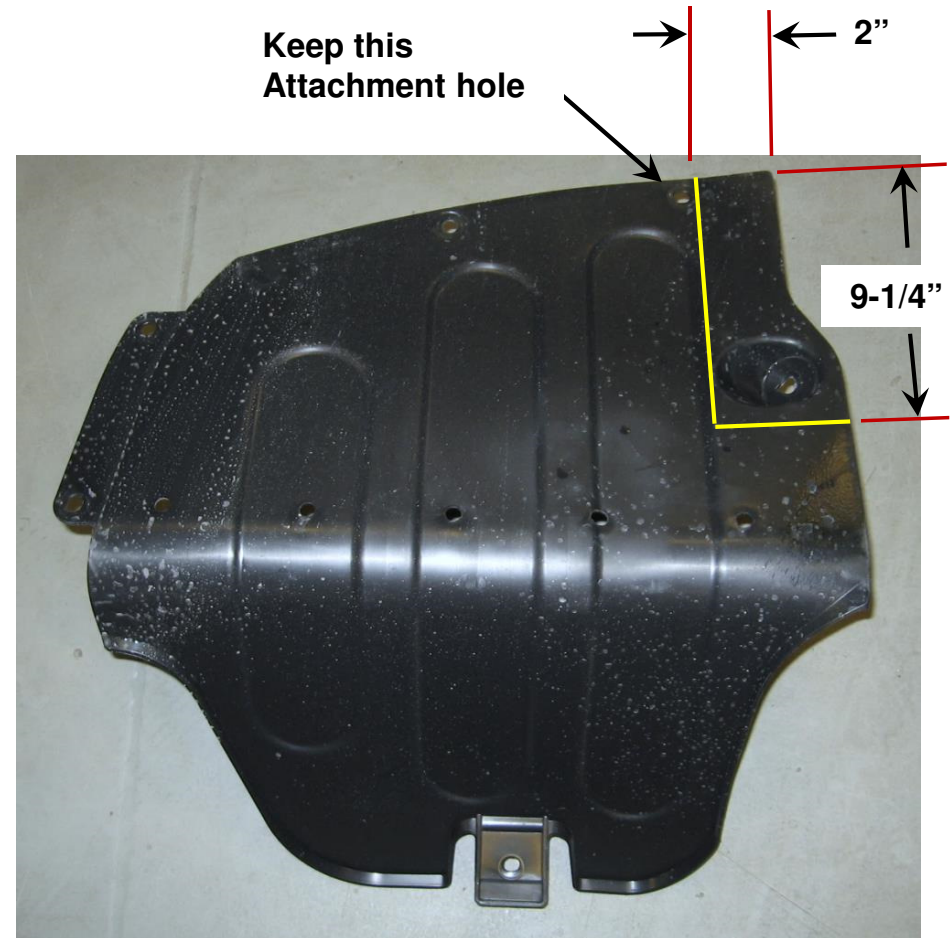
PART NUMBERS: 24965, 77965, CQT24965



Passenger's side muffler heat shield shown
Driver's side opposite

Hyundai Sonata
muffler heat shields

Figure 9



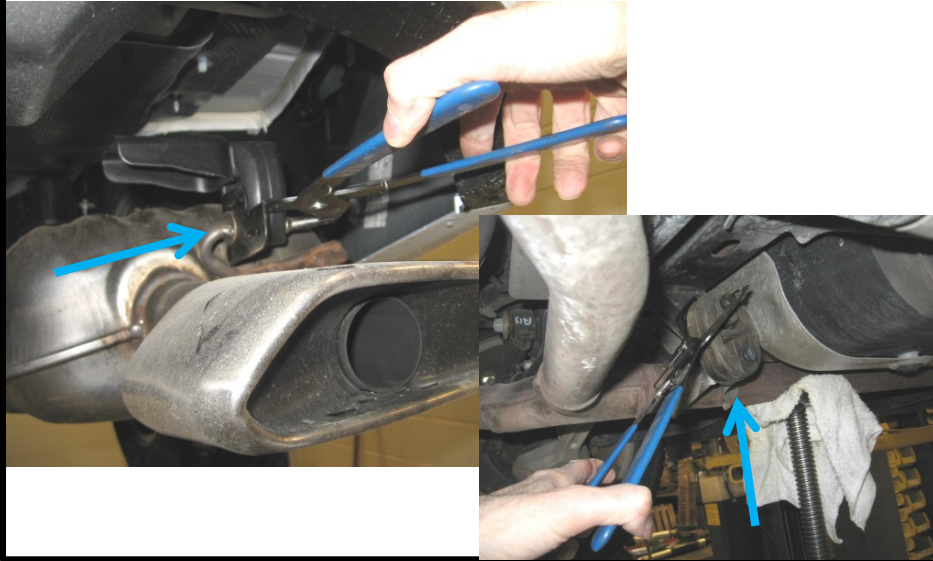
Plastic appearance panel
Optional trim or return to owner

Vehicle Forward



Figure 10

- 1. Lower mufflers** – Lower muffler(s) by removing the rearmost rubber hanger(s) and the rubber hanger near rear axle. A spray a lubricant on rubber hangers makes them slide off metal pins more easily. **NOTE:** Be careful that exhaust is supported before removing rubber hangers.



- 2. Remove factory muffler hanger bracket(s)** - Remove (2) hex nuts per hanger bracket to remove. Return bracket(s) and fasteners to vehicle owner.



- 3. Remove drivers side plastic appearance panel (if present)** – Either return to vehicle owner or see figure 10 for optional trimming of panel.



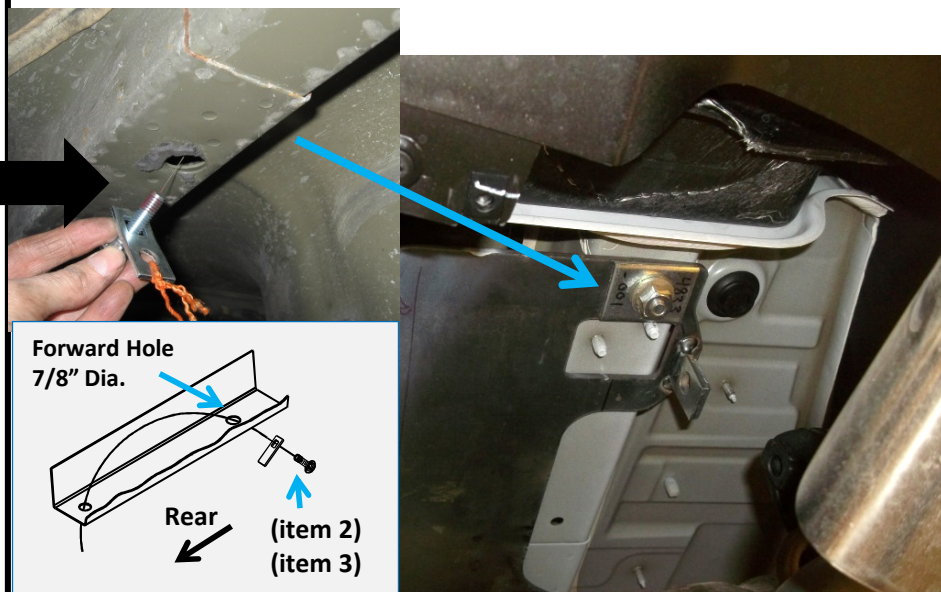
- 4. Remove plastic appearance panel (if present) covering space between bumper fascia and trunk pan** – Remove and return to vehicle owner.



5. **Remove heat shield(s)** – Remove the hex nuts (3 to 5 per heat shield) holding heat shield(s) to bottom of vehicle. **NOTE:** Shield(s) will be trimmed and replaced prior to installing hitch.



6. **Install rear attachment fasteners** - Using 7/16 pull wires provided, fish wire 7/16 x 1.50 long carriage bolts and special washers (**item 3**) through 7/8" diameter holes in bottom of frame, both sides. Pull carriage bolts down through 3/4" diameter holes toward rear of vehicle.



7. **Install forward attachment fasteners** – Using the 7/16 pull wires provided, fish wire 7/16 x 1.25 long carriage bolts and spacer block (**item 4**) up through 7/8" diameter holes and back down through same hole, both sides.

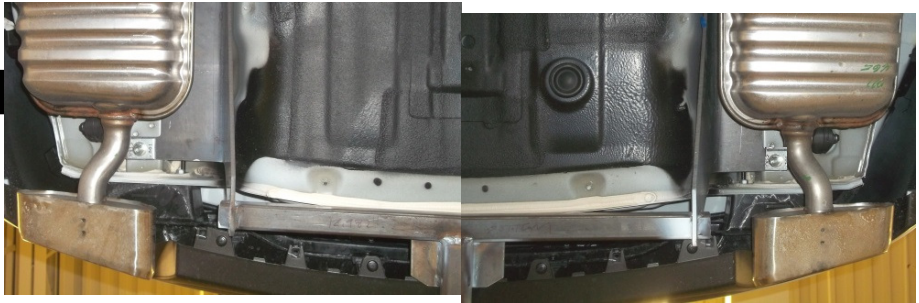


8. **Trim muffler heat shield(s)** - Trim heat shield(s), See figures 7, 8, and 9 for details on how to trim muffler heat shield(s).

9. **Reinstall heat shields** – Reinstall heat shields using same hardware removed.

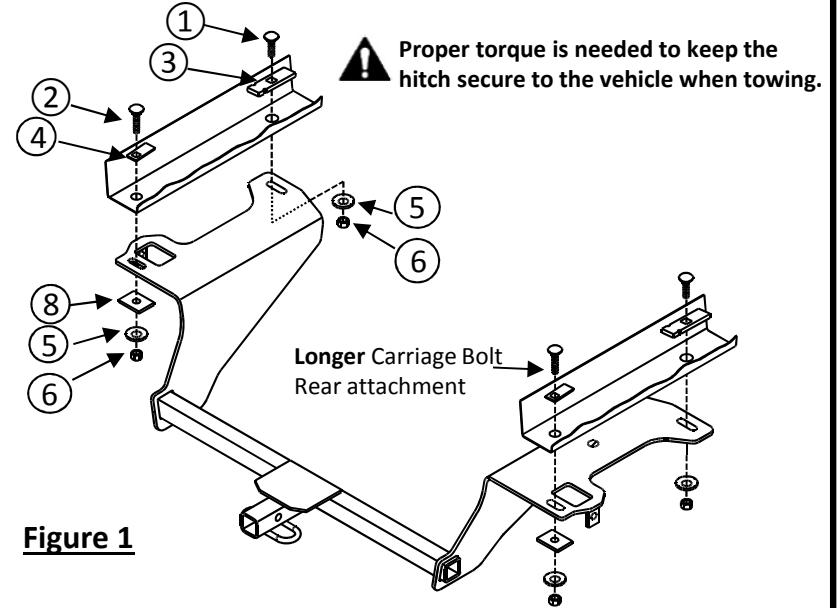


10. Raise hitch into position - Install 7/16 conical toothed washers and hex nuts onto forward carriage bolt attachments. Install spacer blocks (item 8), 7/16 conical toothed washers, and 7/16 hex nuts onto rearmost carriage bolt attachments (Fig. 1). Be careful not to push bolts back up into frame. **NOTE:** Insert 7/16" flat washers (item 7) as needed on rear attachments between hitch and frame to take up space for vehicles with raised area for muffler hangers. On dual exhaust vehicles, it may be necessary to push hitch towards the passenger side as far as possible so that hitch bracket is up against vehicle trunk pan. This allows more clearance for exhaust on Driver's side. Torque fasteners to specifications below.



11. Trim Fascia – On some models it may be necessary to trim a small notch in the fascia at the rear edge of hitch side bracket.

12. Tighten all 7/16-14 fasteners with torque wrench to 50 Lb.-Ft. (68 N*M)



13. Raise muffler(s) back into position - Reattach rubber hangers as shown in Fig 4 or Fig 5. Tighten all M8 fasteners to proper torque specifications. **NOTE:** Hardware configuration varies by vehicle.



14. Reinstall plastic appearance panel – Using existing hardware, reinstall panel removed in Step 3 if trimming was preferred by vehicle owner.

