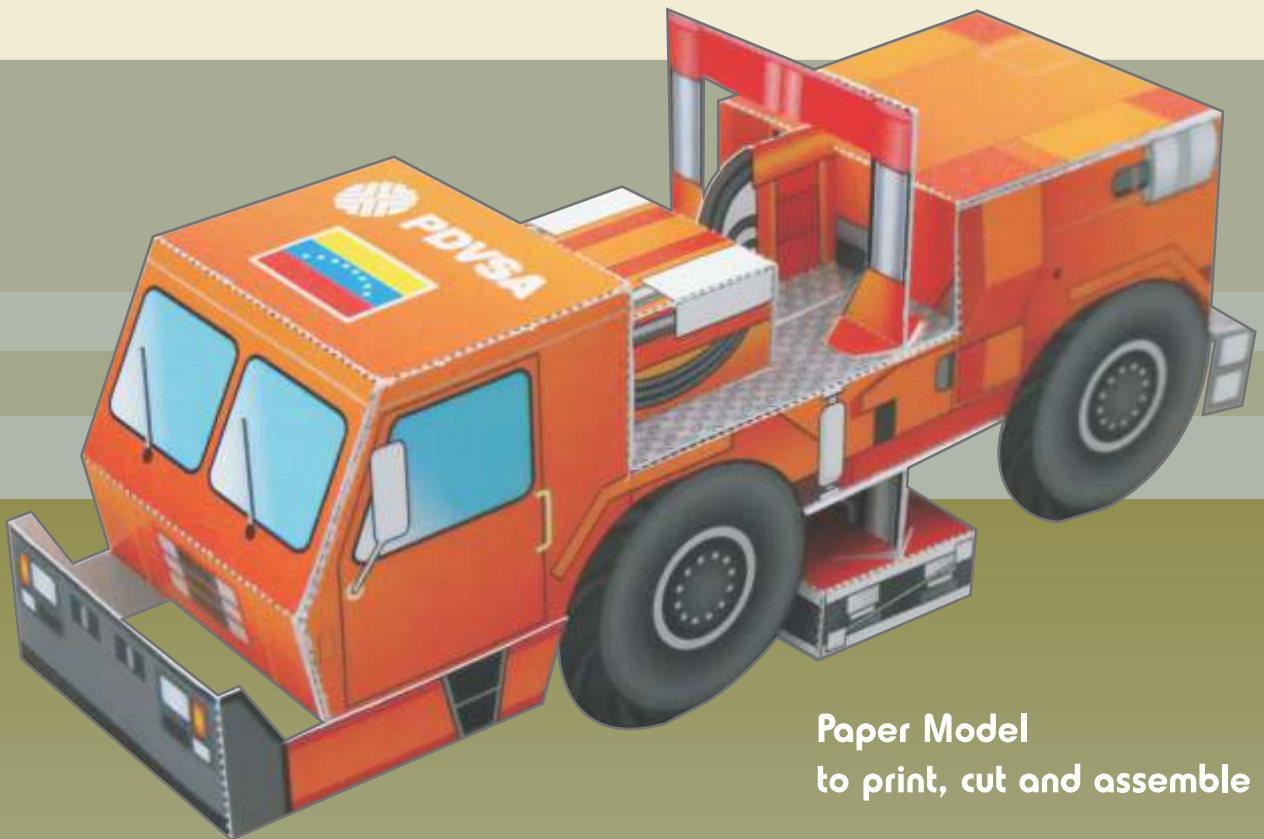


① The Seismic Survey Truck



We, at the People's Ministry of Petroleum and Mining and PDVSA, have undertaken the task of educating Venezuelans, aware of the reasonable and sovereign use of oil, convinced of its strategic value to fight poverty and join peoples.

We are positive that getting on the activities carried out by PDVSA to turn oil and gas into gasoline, computer items, toys and a wide array of useful goods will make us more careful and watchful of whatever is said and done in our oil industry.

For such purposes, we are handing in you the Series "Learning about oil," composed of simple, ready-to-assemble models of oil operations.

This time, we are providing you with the Seismic Survey Truck. We are certain that as soon as you finish off, you will have discovered, along with us, one of the so many wonderful worlds of the oil industry.

How to use this material.

- Print the cover, the text information and the instructions to assemble the model, on bond paper.
- On a printer that accepts cardboard, print the parts of the model and its base. Use letter-size bristol cardboard.



THE SEISMIC SURVEY TRUCK

To ascertain whether there is oil and gas in the subsurface, engineers embark on a process known as exploration. With the support of sciences, such as geophysics, geology, and geochemistry, there is the possibility to determine hydrocarbons accumulations in the earth's crust.

Seismic is among the resources used by engineers to probe into underlying hydrocarbons deposits. This method helps measure natural or induced earth vibrations.

WITH:

- 1- A large plate between the wheels.
- 2 - A network of seismic meters called geophones.
- 3 - A seismograph connected to the geophones.

HOW DOES IT WORK?

The seismic survey truck thumps on the soil with a plate in order to cause small artificial earthquakes. As soon as the seismic wave propagates, a network of seismic meters or geophones collects the information. Such information is recorded and processed by the staff entrusted with oil exploration.

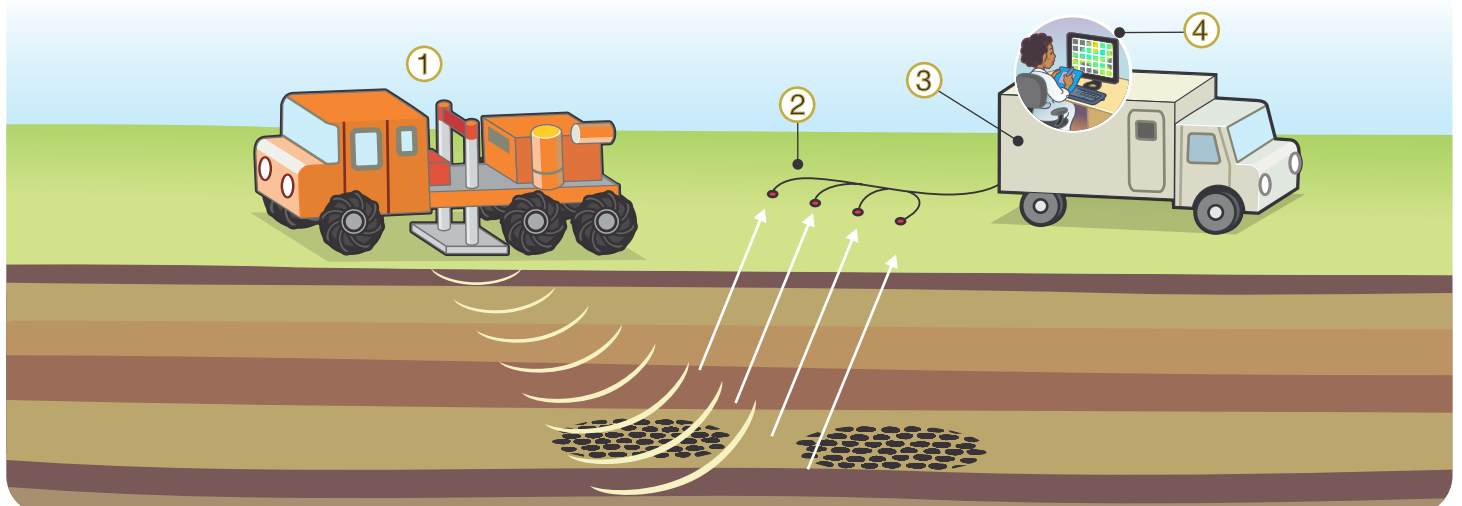
The output is a seismic or radiographic image of the substratum. This image is used by the industry to ponder on the existence of hydrocarbon deposits and decide whether starting out the next stage involving drilling and production.

THE SEISMIC SURVEY TRUCK IS EQUIPPED

Operation of the seismic wave truck

- 1 SEISMIC SURVEY TRUCK.
- 2 GEOPHONES.

- 3 DATA RECORDING TRUCK.
- 4 DATA PROCESSING AND INTERPRETATION.



HOW TO ASSEMBLE THE SEISMIC SURVEY TRUCK



DOTTED LINES
Show the area that needs to be **folded**.



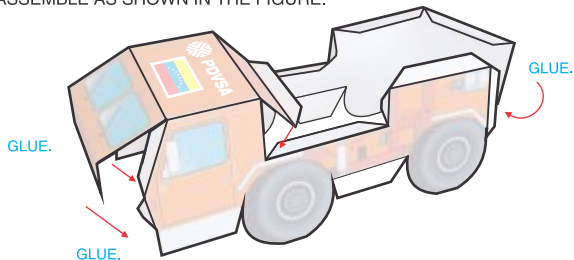
SOLID LINES
Show the area that needs to be **cut out**.

- Before cutting the pieces out, go over all the fold lines with the tip of an exhausted ballpoint pen and a rule. This will help you fold the pieces.
- Cut out every piece; arrange them in your workplace in alphabetical order (each piece has an identity letter).
- Fold each piece.
- Carefully read the directions before starting.
- Take your time to assemble each piece, following the steps.
- Once the model is over, glue it on its base; the base is overleaf.
- You can glue the base on a piece of cardboard, polyethylene, or MDF, of 23 x 30 cm to make it steadier.

FRAME OF THE SEISMIC SURVEY TRUCK. "A" PIECE.

1 "A" Piece. TRUCK.

FOLD THE PARTS AND FLAPS OF THE TRUCK, GLUE THEM AND ASSEMBLE AS SHOWN IN THE FIGURE.



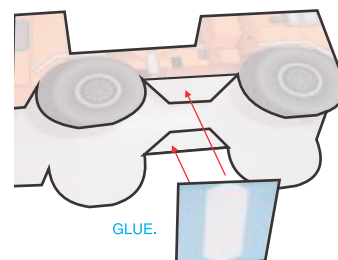
2 "A-1" Piece. TRUCK DECK.

FOLD THE PIECE AND GLUE IT ON THE TRUCK.



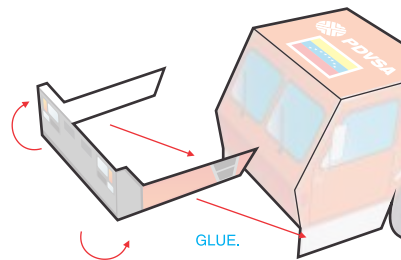
3 "A-2" Piece. BOTTOM COVER.

GLUE THE PIECE UNDERNEATH THE TRUCK.



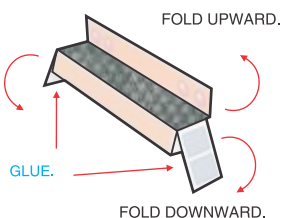
4 "B" Piece. FRONT.

FOLD THE PIECE SIDES AND STICK IT ON THE MARKED SPOT, IN THE TRUCK FRONT.



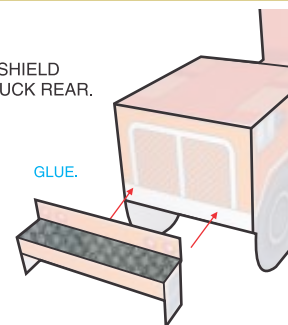
5 "C" Piece. REAR GUARD

ASSEMBLE THE PIECE AS SHOWN IN THE FIGURE.



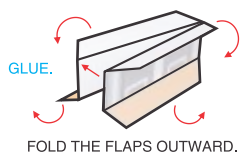
6

GLUE THE SHIELD ON THE TRUCK REAR.



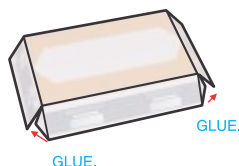
7 "D" Piece. HYDRAULIC BASE.

FOLD THE FLAPS DOWN.



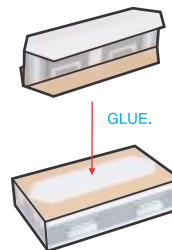
8 "E" Piece. SEISMIC DEVICE.

ASSEMBLE THE PIECE AS SHOWN IN THE FIGURE.



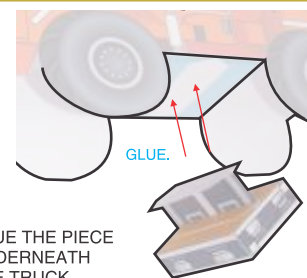
9

JOIN THE TWO PIECES AS SHOWN IN THE FIGURE.



10

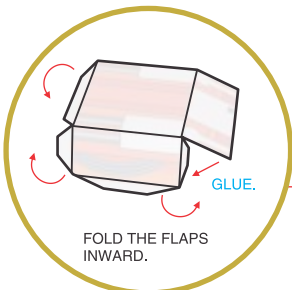
GLUE THE PIECE UNDERNEATH THE TRUCK.



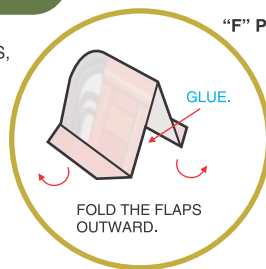
TRUCK COVER PIECES.

11 ASSEMBLE THE "F", "G" AND "H" PIECES, AS SHOWN IN THE FIGURES.

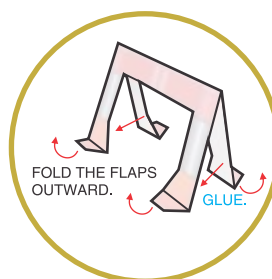
"G" Piece.



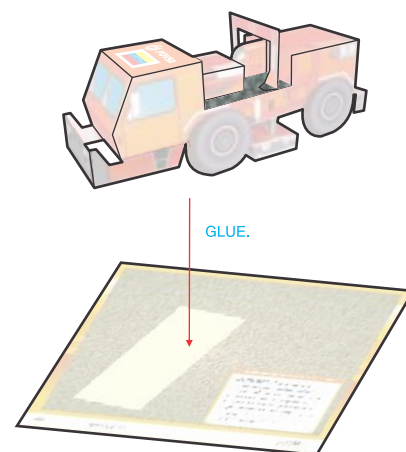
"F" Piece.



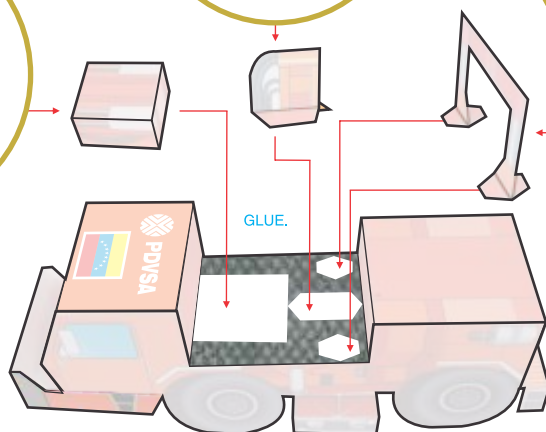
"H" Piece.

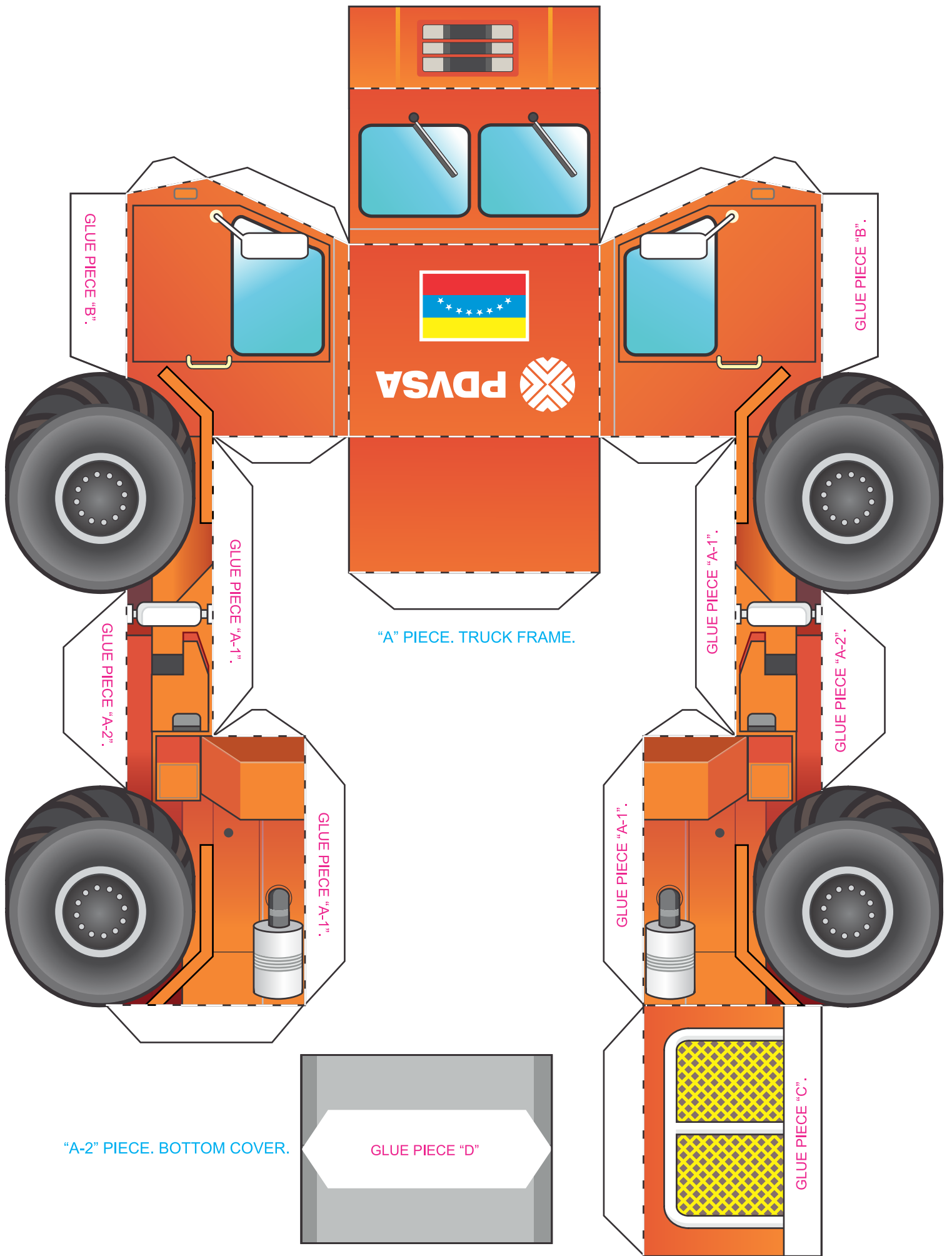


13 PLACE THE MODEL ON ITS BASE. THE BASE IS OVERLEAF.



12 STICK THE PIECES ON THE TRUCK DECK, ON THE MARKED SPOTS.





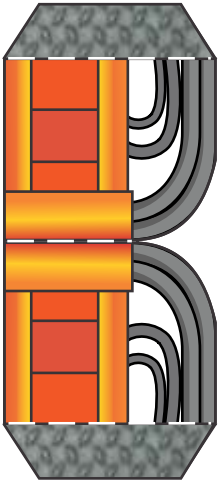
"A" PIECE. TRUCK FRAME.

"A-2" PIECE. BOTTOM COVER.

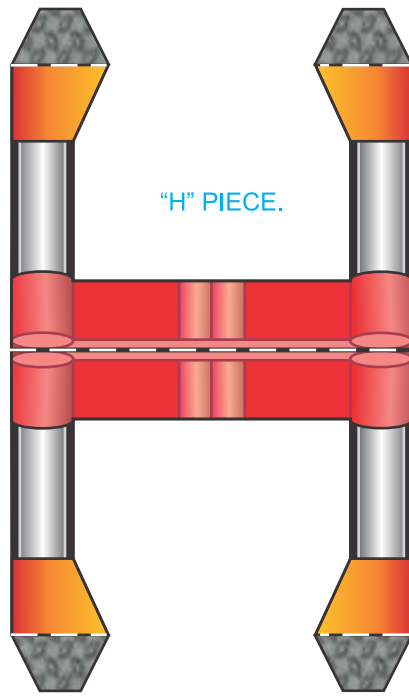
GLUE PIECE "D"

GLUE PIECE "C".

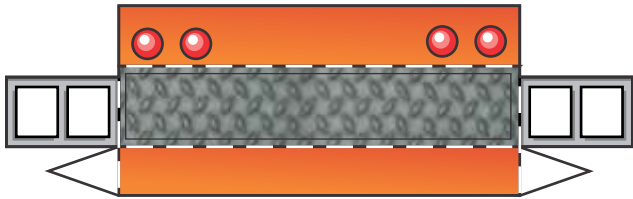
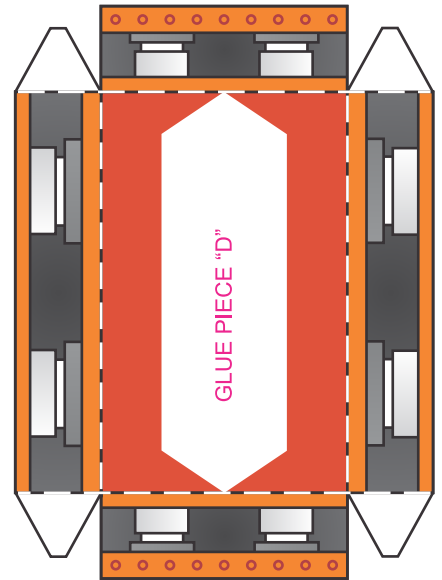
"G" PIECE.



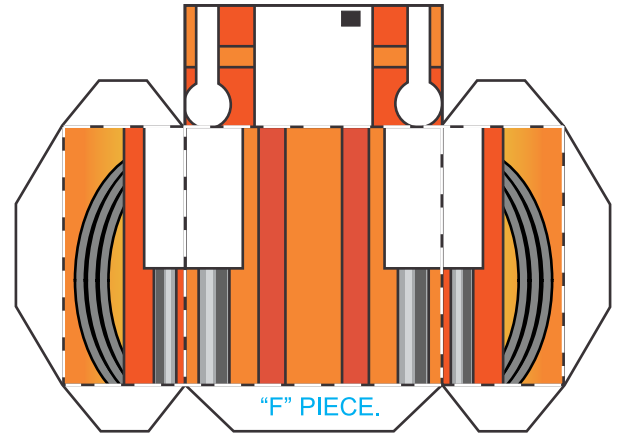
"H" PIECE.



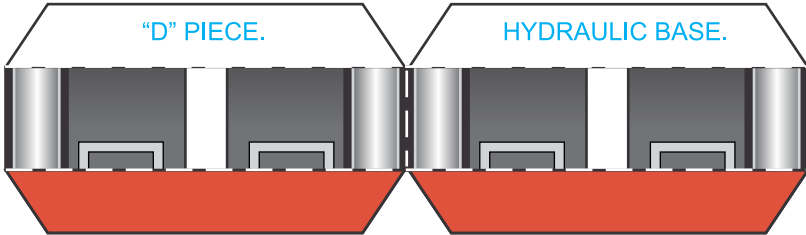
"E" PIECE. SEISMIC DEVICE.



"C" PIECE. REAR GUARD.



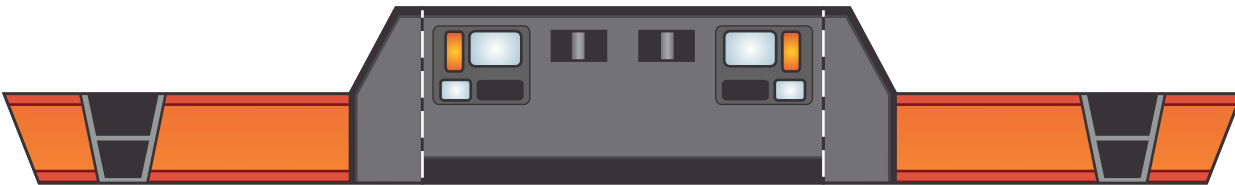
"F" PIECE.



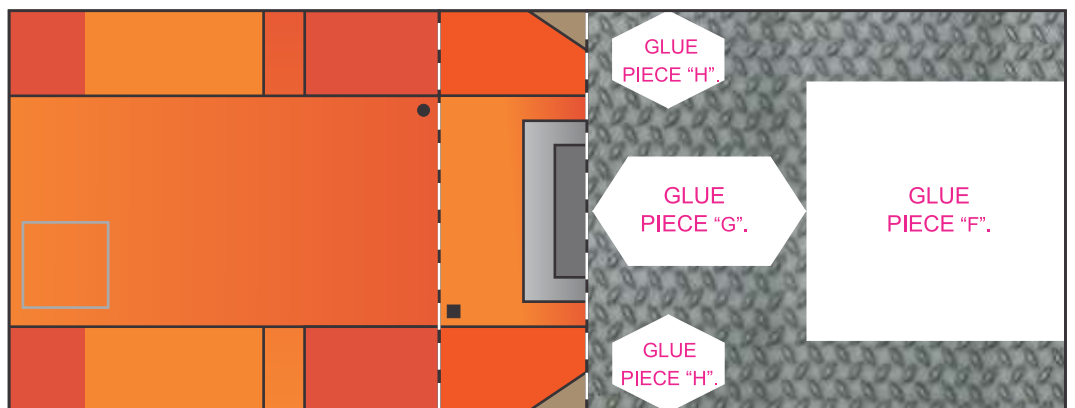
"D" PIECE.

HYDRAULIC BASE.

"B" PIECE, FRONT.



"A-1" PIECE. TRUCK DECK.




GLUE
PIECE "H".

GLUE
PIECE "G".

GLUE
PIECE "H".

GLUE
PIECE "F".



AREA TO PLACE
THE SEISMIC SURVEY TRUCK

The Seismic Survey Truck

HOW DOES IT WORK?

The seismic survey truck thumps on the soil with a plate in order to cause small artificial earthquakes. As soon as the seismic wave propagates, a network of seismic meters or geophones collects the information. Such information is recorded and processed by the staff entrusted with oil exploration.

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