

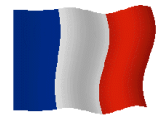
STUDY OF ALTERNATIVES TO THE USE OF ACTIVE ANTI-PERSONNEL MINES FOR TRAINING PURPOSES EXCEPTION ARTICLE 3

*Lieutenant-colonel SAHGUI Djimon
Directeur du CPADD*



Genève

Vendredi 21 juin 2024



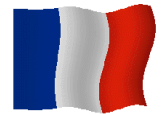
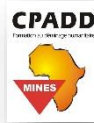
INTRODUCTION

Created in 2002 in partnership with France following the Bamako Conference of February 15 and 16, 2001 on the universalization of the Ottawa Convention, the CPADD is Africa's pioneer in the field of humanitarian demining training.

It is the perfect example of the application of Article 7 of the Ottawa Convention on regional cooperation.

In 21 years, it has trained executives from 49 countries in Africa, Asia, America and Europe. Training is based on demilitarized anti-personnel mines and inert anti-personnel mines.

As such, the exceptions granted by article 3 of the APMBC are not essential for the training of specialists.



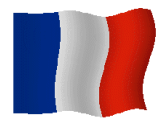
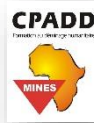
SCOPE

I. PRESENTATION OF CPADD

1. History
2. Mission
3. Available trainings

II. ALTERNATIVES TO ACTIVE AP MINES USE

1. Demilitarised antipersonnel mines
2. Replica mines or models
3. Exercise or simulation mines



I. PRESENTATION OF CPADD

1. History

ENTRY INTO FORCE OF CCW

(2 december 1983)

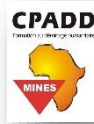
**ENTRY INTO FORCE OF OTTAWA
CONVENTION** (1st march 1999)

Mine Ban Treaty,

CONFERENCE OF BAMAKO
(February 2001)

Bamako conference,

CREATION OF CPADD (2002)



I. PRESENTATION OF CPADD

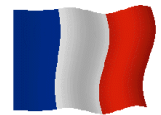
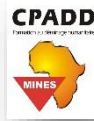
2. Mission

Contribute to the creation of an african capacity in the following fields:

Humanitarian demining: fight against explosive devices

PSSM: Physical Stockpile Security Management (2014)

SALW: Fight against proliferation of Small Arms and Light Weapons (2016)



I. PRESENTATION OF CPADD

3. Available trainings

EOD / C-IED (9)

1. EOD1 (4 weeks)
2. EOD2 (8 weeks) ECOWAS (10-06-24)
3. EOD3 (8 weeks)
4. I-EEI (8 weeks)
5. EOR (3 weeks)
6. Mon. C-EEI (3 weeks)
7. OFF EOD EM (6 weeks)
8. IACQ (6 weeks)
9. FDF DEM DEPOLL (5 weeks)

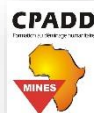
WEAPONS / AMMUNITION MANAGEMENT (6)

ALPC

- 1.ALPC1 : (2 weeks)
- 2.ALPC2 : (2 weeks)

PSSM

- 1.PSSM1: (2 weeks)
- 2.PSSM2: (6 weeks)
- 3.PSSM3 : (4 weeks)
- 4.ToT PSSM2 (2 weeks)



I. PRESENTATION OF CPADD

1. Angola
2. Angleterre
3. Algérie
4. Bénin
5. Bosnie
6. Brésil
7. Burkina
8. Belgique
9. Botswana
10. Burundi
11. Cameroun
12. Cap vert
13. Colombie
14. Congo bra.
15. Côte d'Ivoire
16. Djibouti
17. Egypte
18. Ethiopie
19. Eswatini /Swarziland
20. France
21. Gabon
22. Gambie
23. Ghana
24. Guinée Bissau
25. Guinée
26. Guinée Equatoriale
27. Kenya
28. Libéria
29. Liban
30. Madagascar
31. Mali
32. Mauritanie
33. Niger
34. Nigéria
35. Ouganda
36. RCA
37. RDC
38. Rwanda
39. Sierra-Léon
40. Sud Soudan
41. Sénégal
42. Soudan
43. Maroc/Sahara Occidentale
44. Tanzanie
45. Tchad
46. Tunisie
47. Togo
48. Zambie
49. Somalie

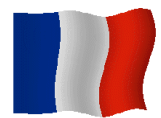
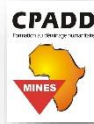
Origins of trainees

49 COUNTRIES

**4406
TRAINED**

**3840
QUALIFIED**

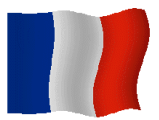
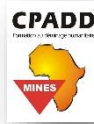
AU 31/12/2023



II. ALTERNATIVES TO ACTIVE AP MINES USE



The development of technical and practical capacities requires the availability of anti-personnel mines similar to real mines. Initially, the military proceeded by demilitarizing mines, but with the evolution of technology, we now rely mainly on AP mine replicas or mock-ups for training and on exercise mines for practical exercises.

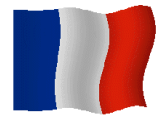


II. ALTERNATIVES TO ACTIVE AP MINES USE

REMINDER

DIFFERENT TYPES OF AP MINES

- Blast mines ,
- Fragmentation stake mines,
- Fragmentation Bouncing mines,
- Fragmentation Directional mines.

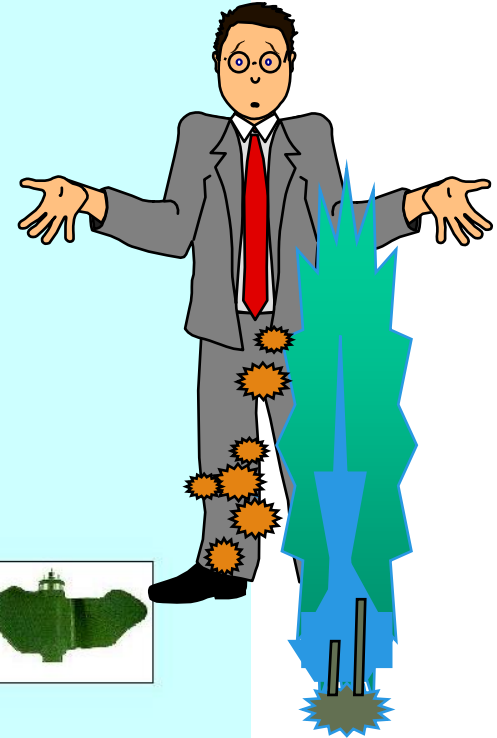


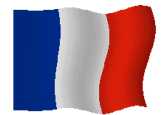
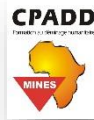
II. ALTERNATIVES TO ACTIVE AP MINES USE

ANTIPERSONEL BLAST MINES



- Usually buried
- Small size
- Pressure Operated
- Small explosive charge
- No fragmentation
- Local damages





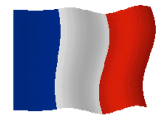
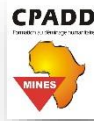
II. ALTERNATIVES TO ACTIVE AP MINES USE

ANTIPERSONEL FRAGMENTATION STAKE MINES



- Mounted on a stake
- Operated by pulling
- Small explosive charge
- All round fragmentation 360°
- Dangerous up to 50m
- Multiple wounds



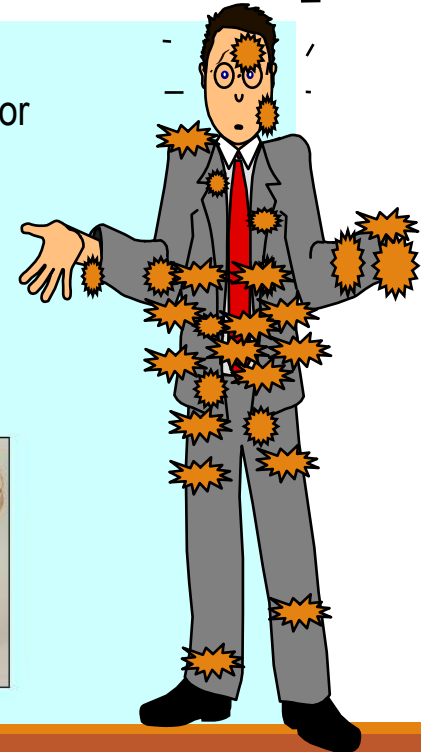


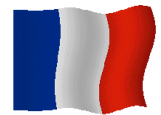
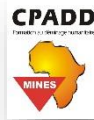
II. ALTERNATIVES TO ACTIVE AP MINES USE

ANTIPERSONEL FRAGMENTATION BOUNCING MINES



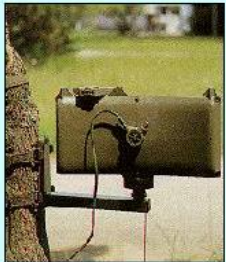
- Usually buried
- Operated by traction, pressure, electric or seismic trigger
- Explode at height of 0,75 et 1,20m
- All round fragmentation 360°
- Effect: D 50m / W 100m
- Multiple wounds



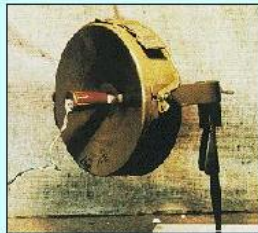


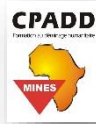
II. ALTERNATIVES TO ACTIVE AP MINES USE

ANTIPERSONEL FRAGMENTATION DIRECTIONAL MINES

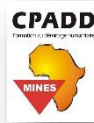


- Placed on ground or at height
- Operated by traction, pressure, electric or seismic trigger
- Large explosive charge
- Unidirectional fragmentation
- Effect: D 20m / W 200m
- Multiple wounds



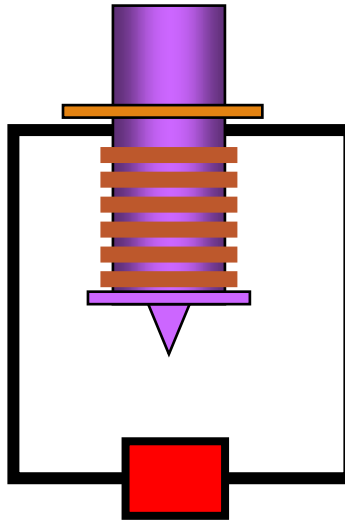


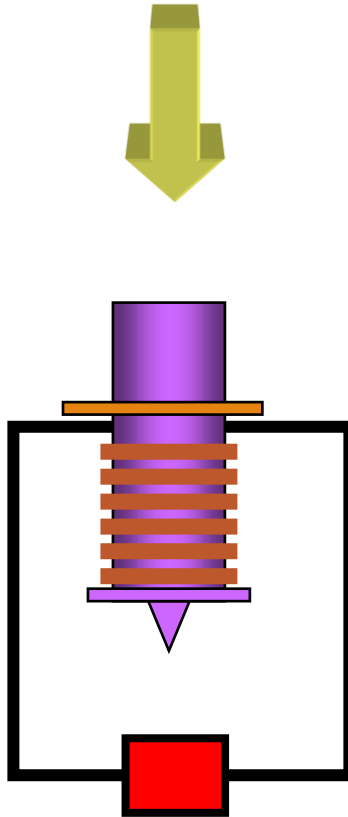
FONCTIONING PRINCIPLES

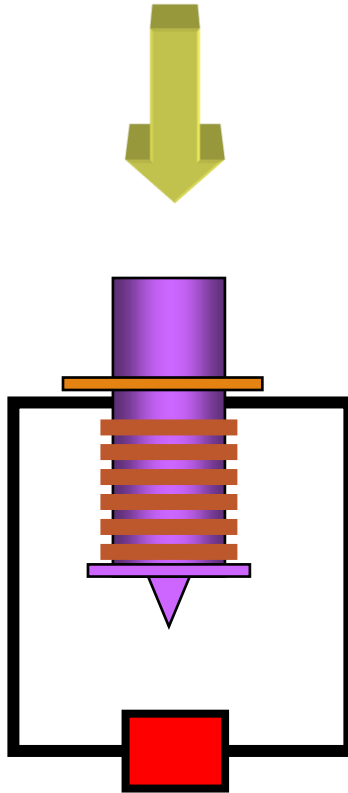


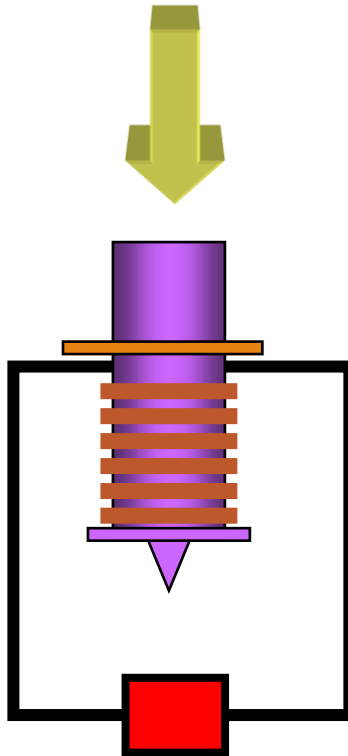
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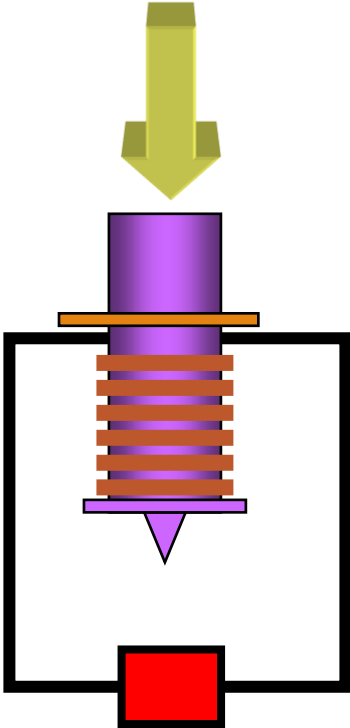
CISAILLEMENT DE GOUPILLE

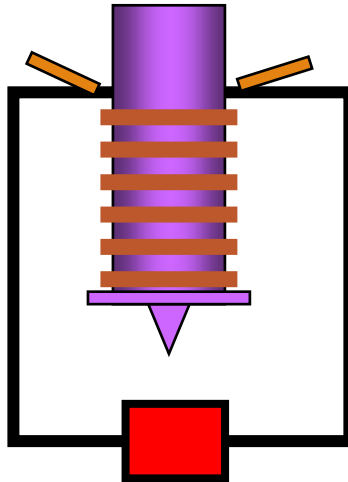


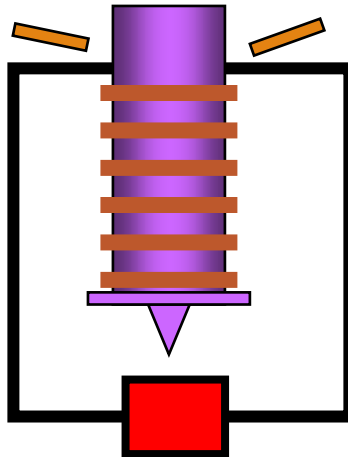


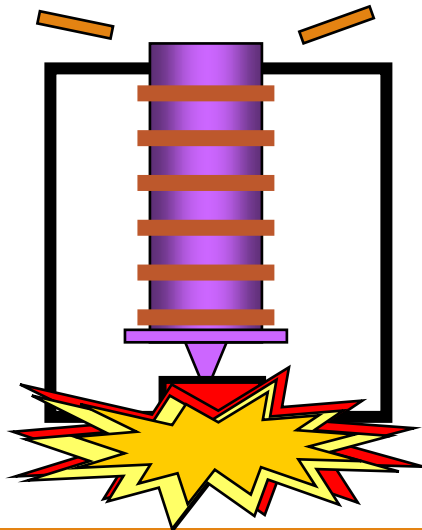


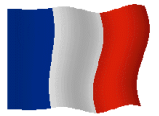
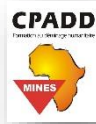






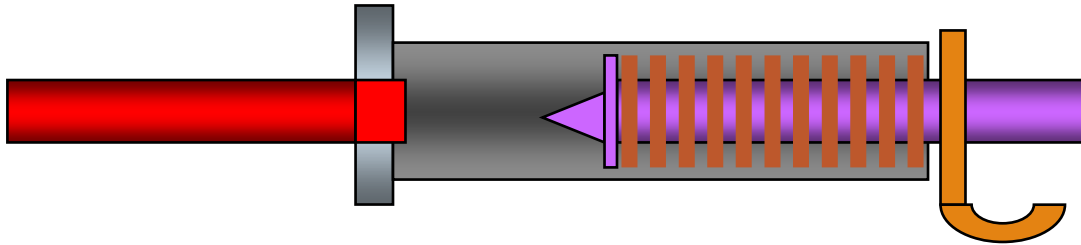


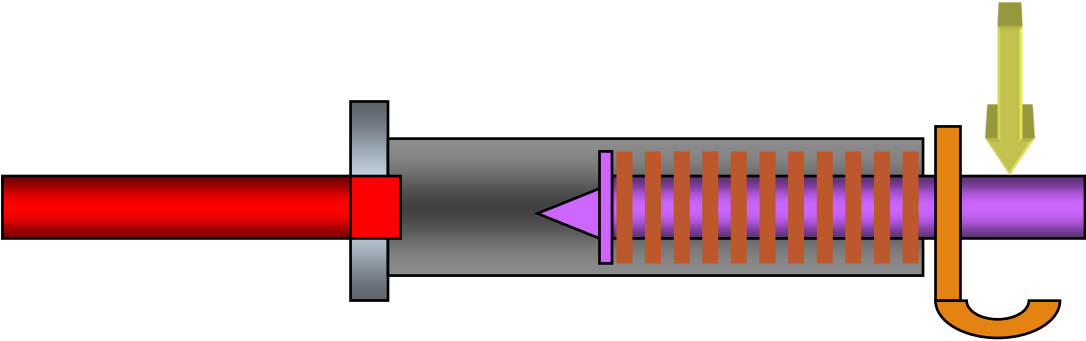


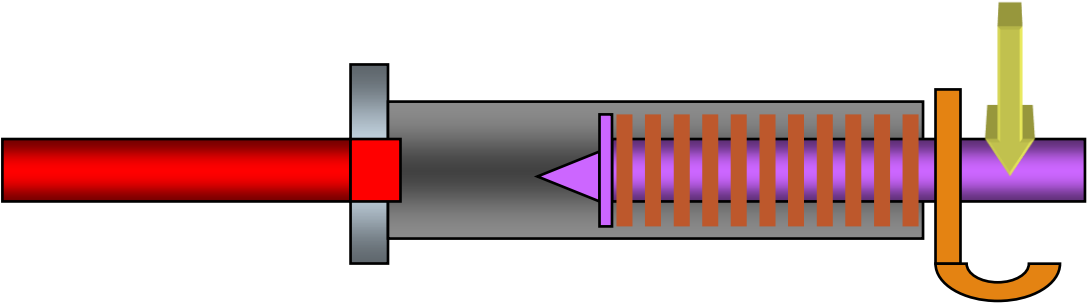


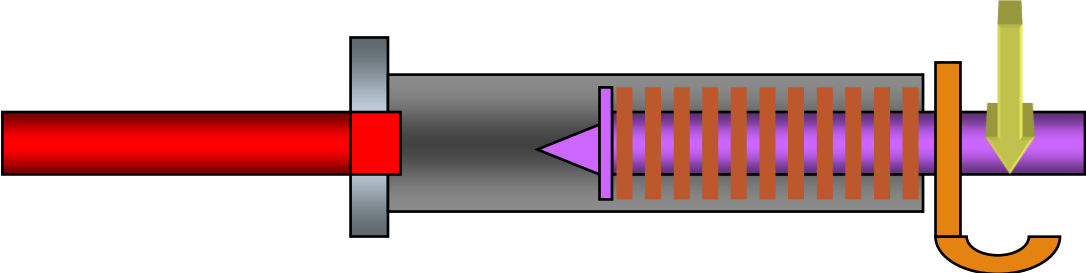
BREAKING OF SHEAR PIN

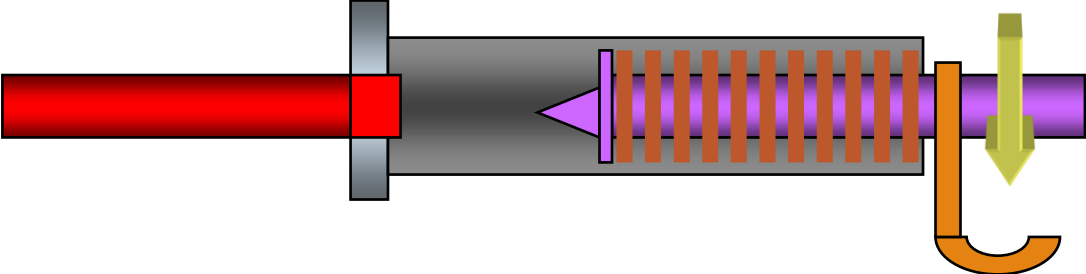
RETRAIT DE GOUPILLE

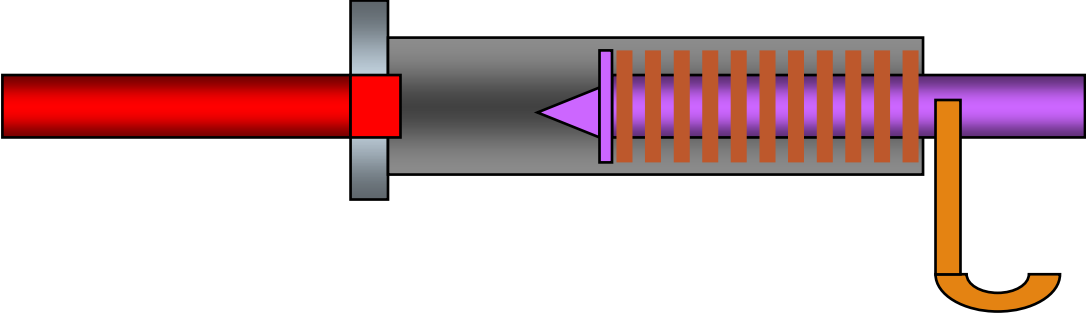


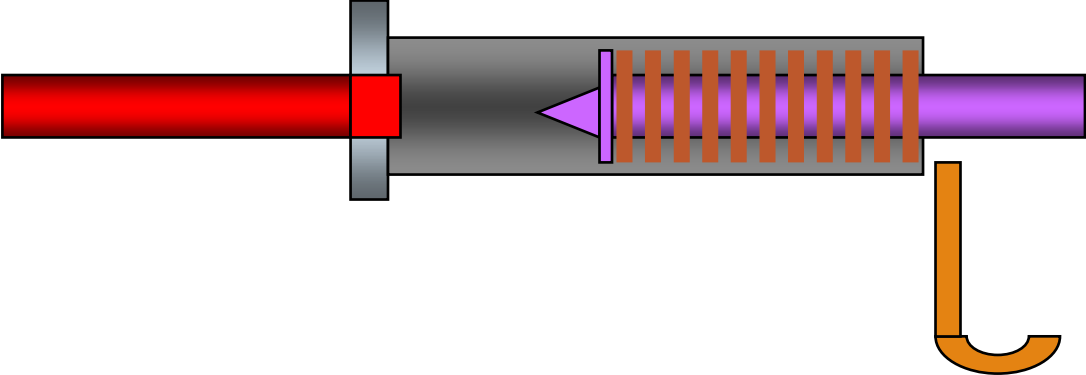


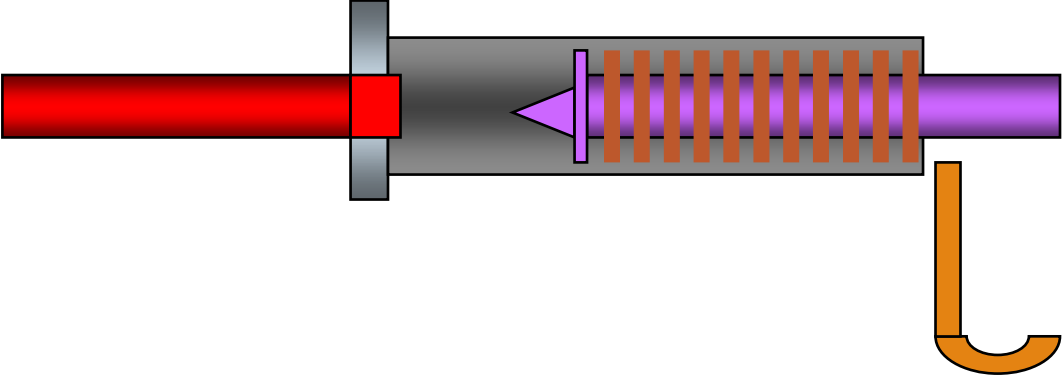


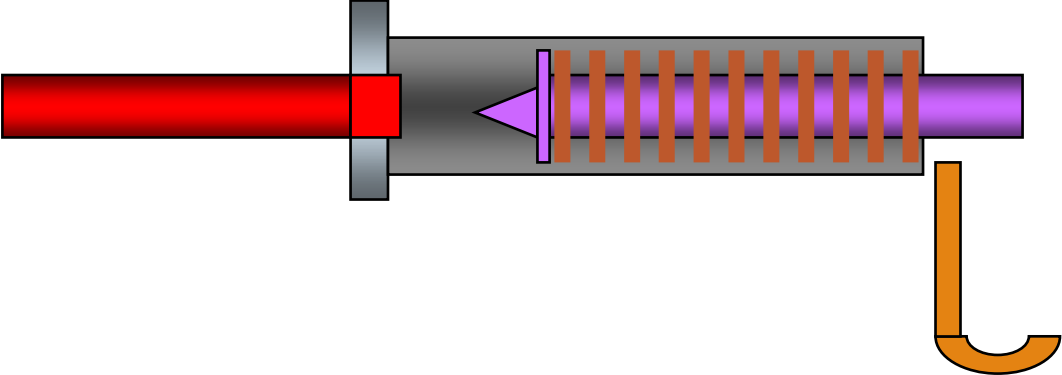


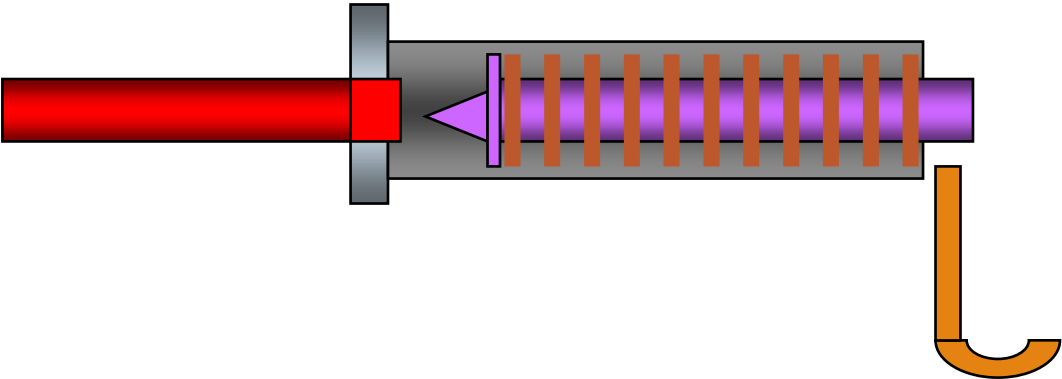


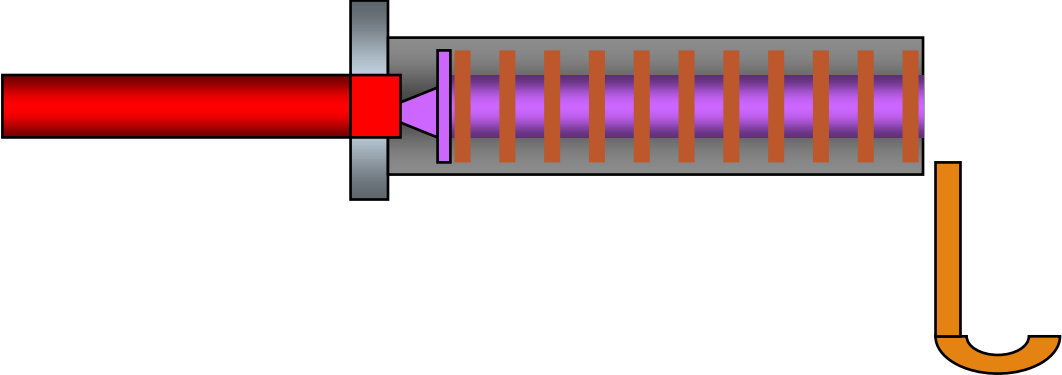


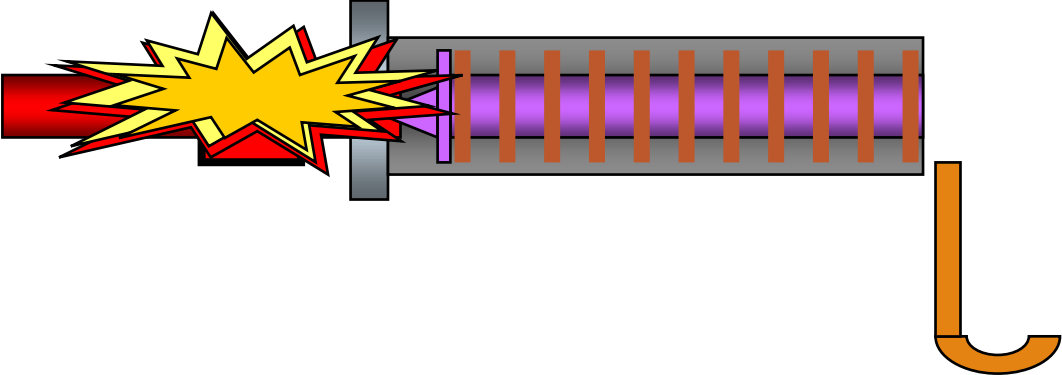


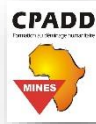






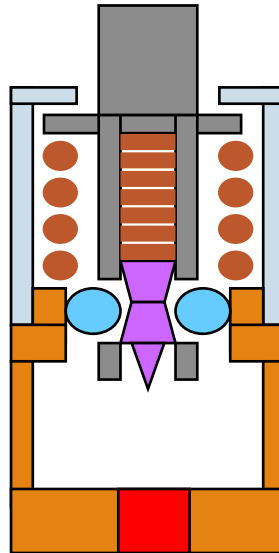


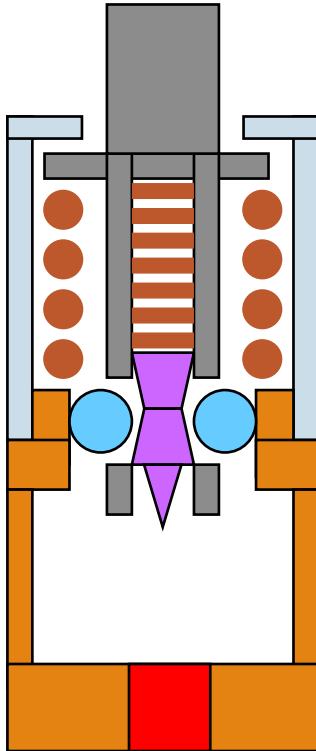


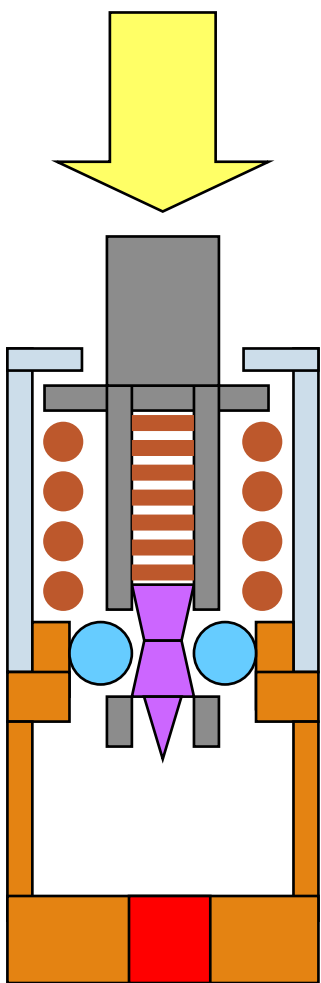


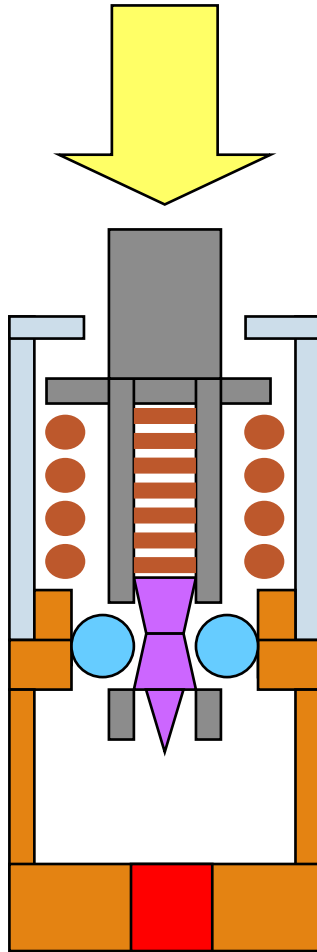
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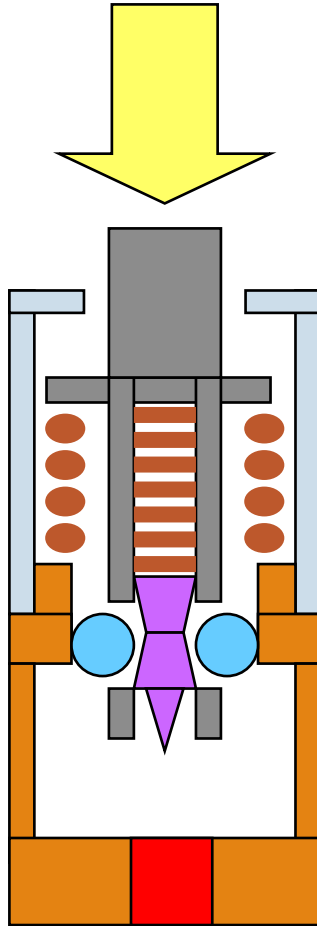
ECHAPPEMENT DE BILLES

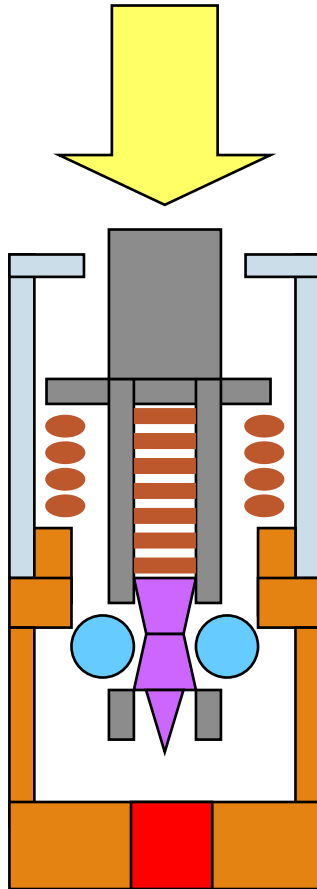


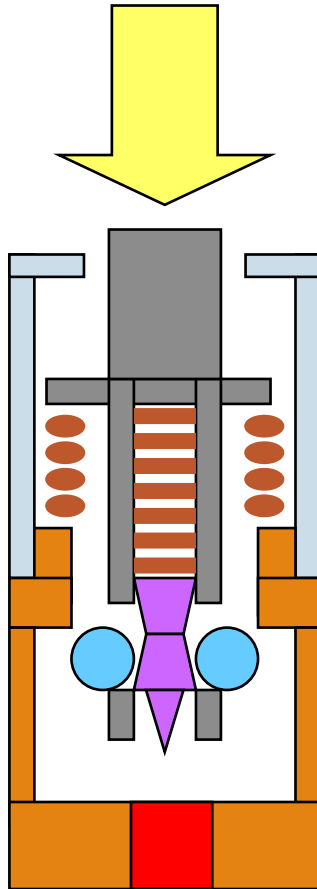


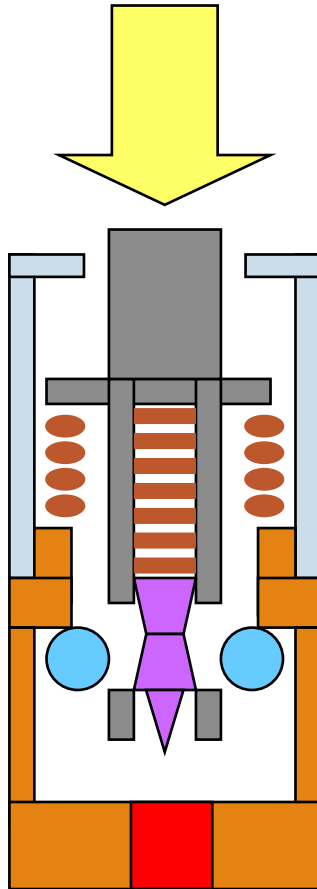


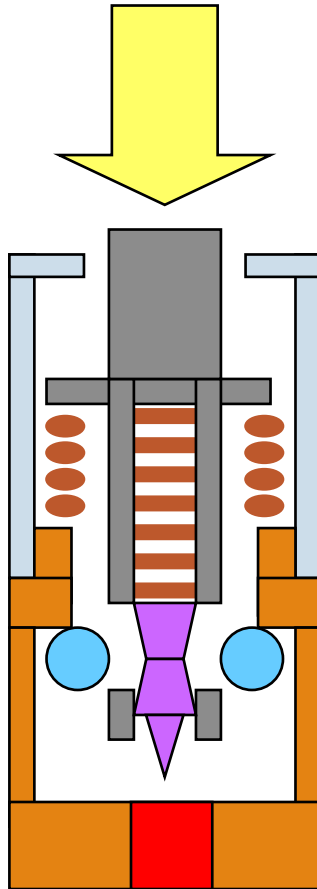


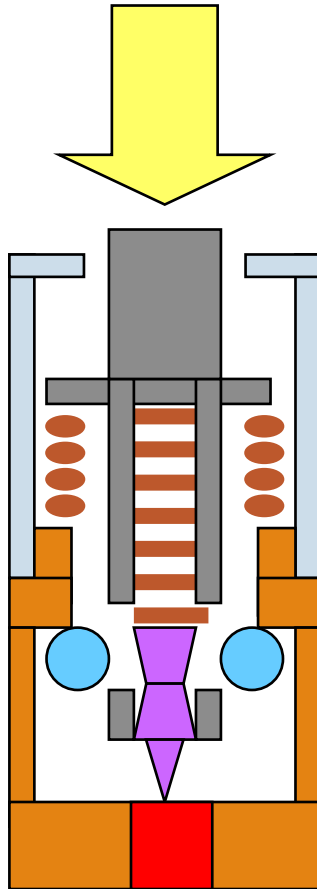


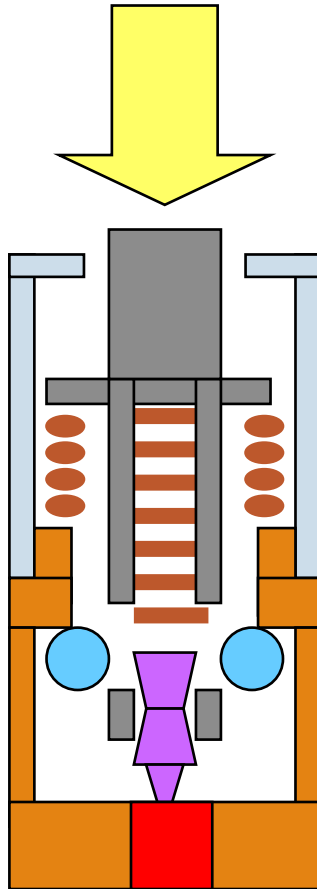


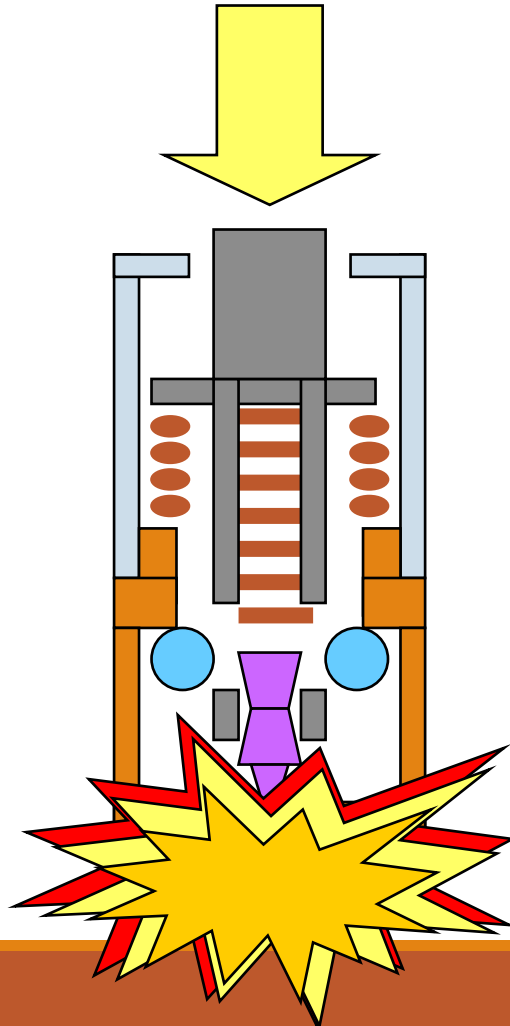


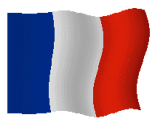
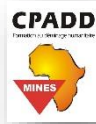






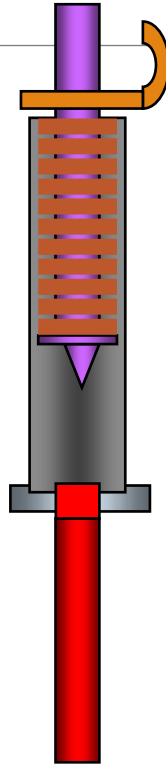


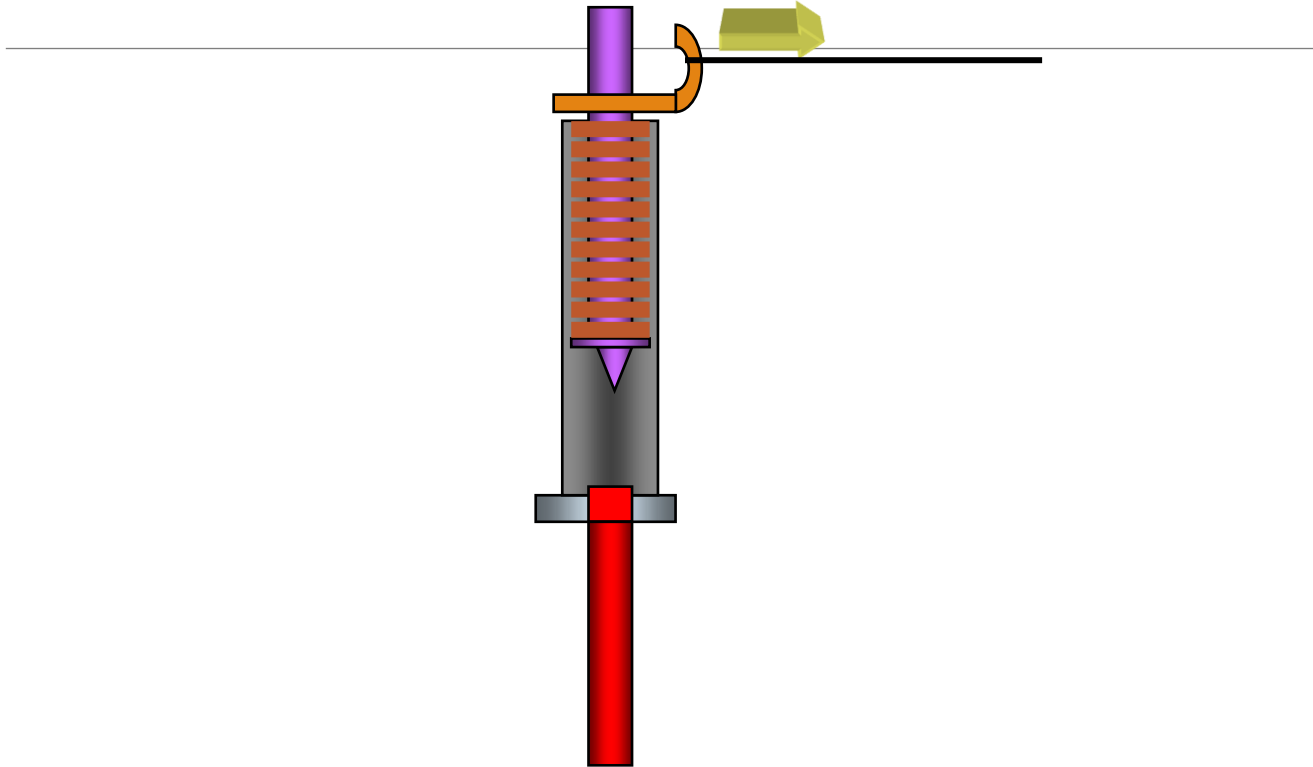
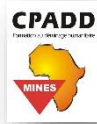


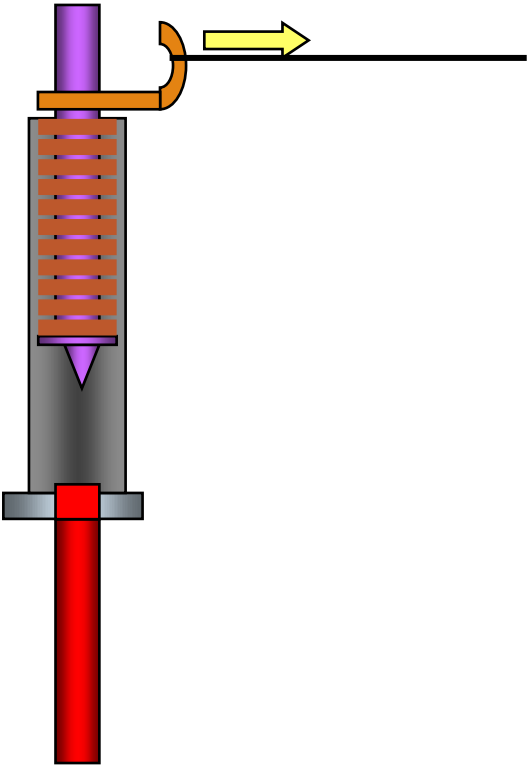


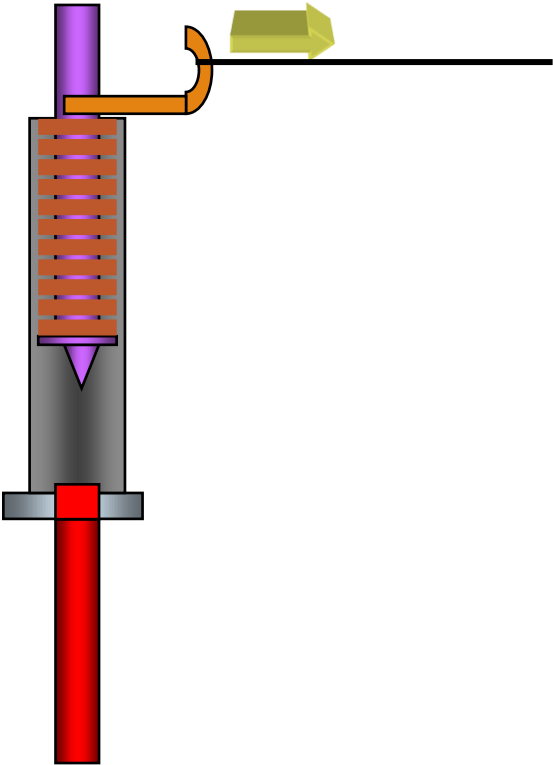
REMOVAL OF FIRING PIN

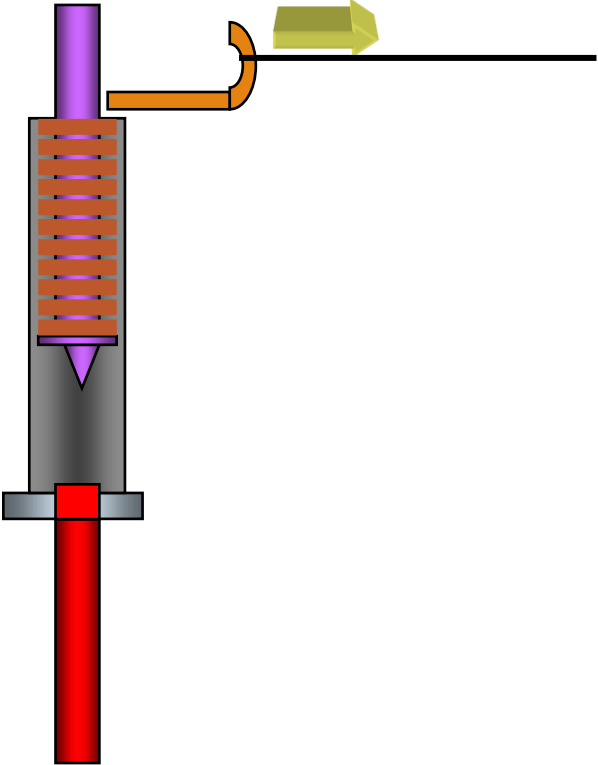
RETRAIT DE GOUPILLE

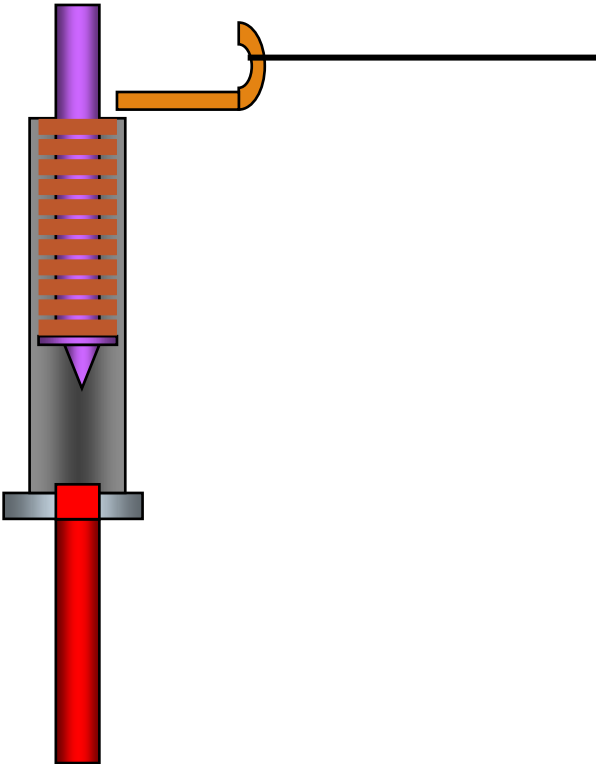


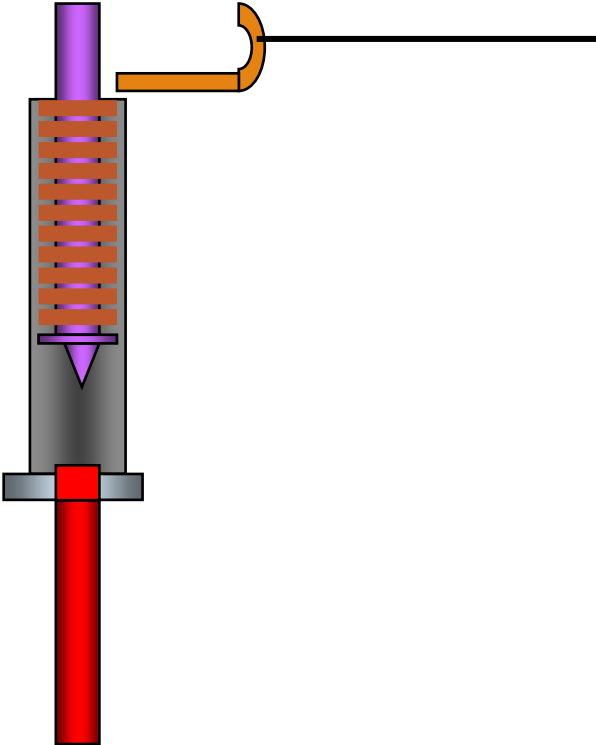


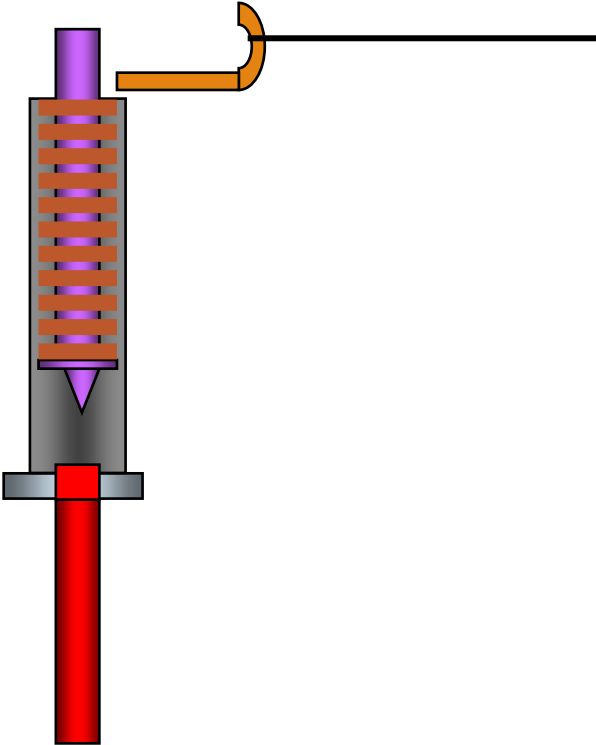


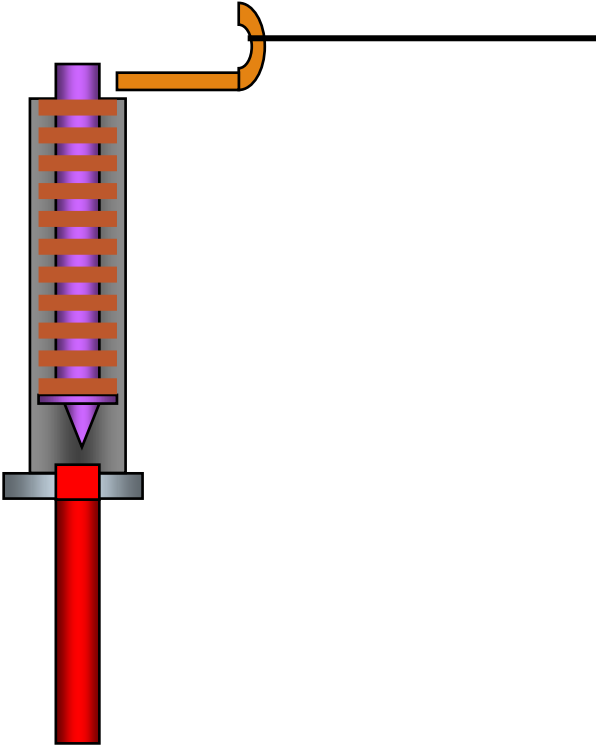


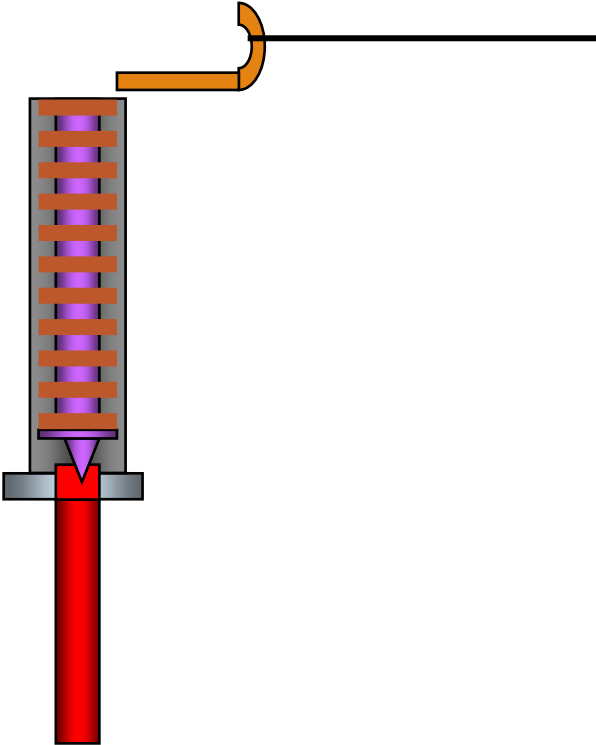


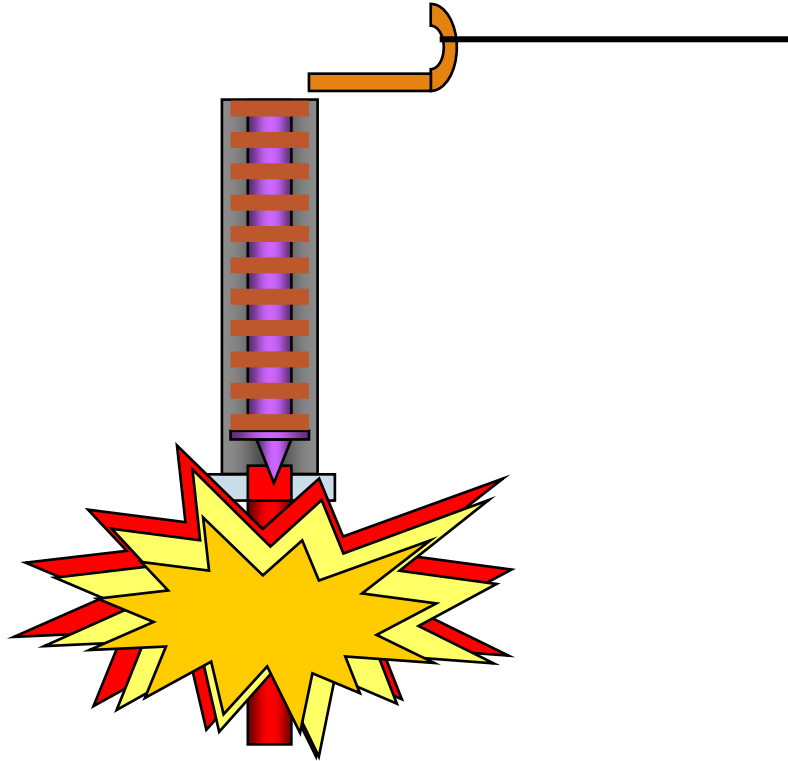


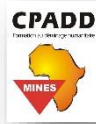






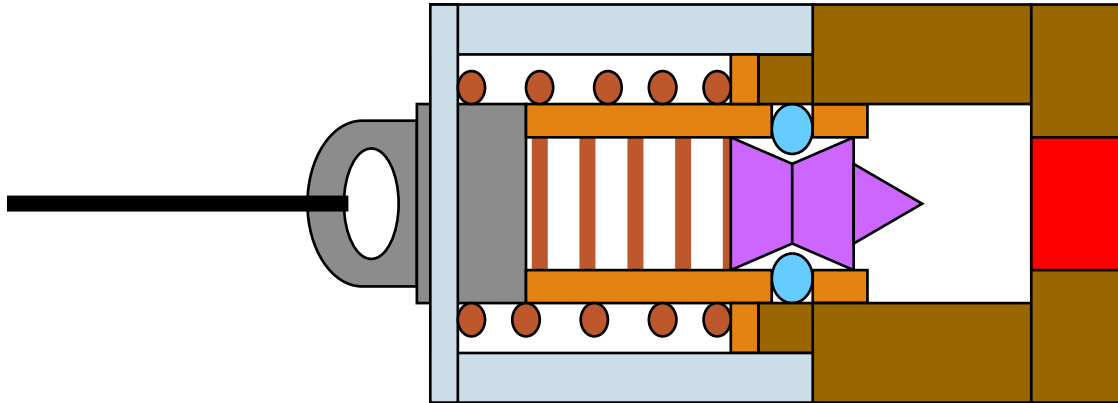


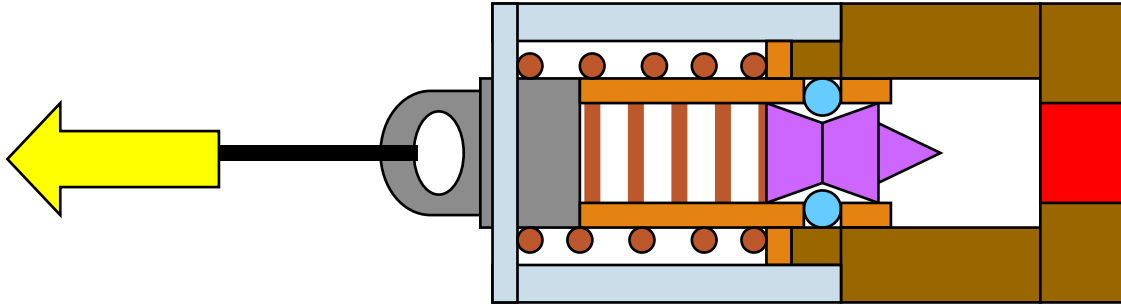


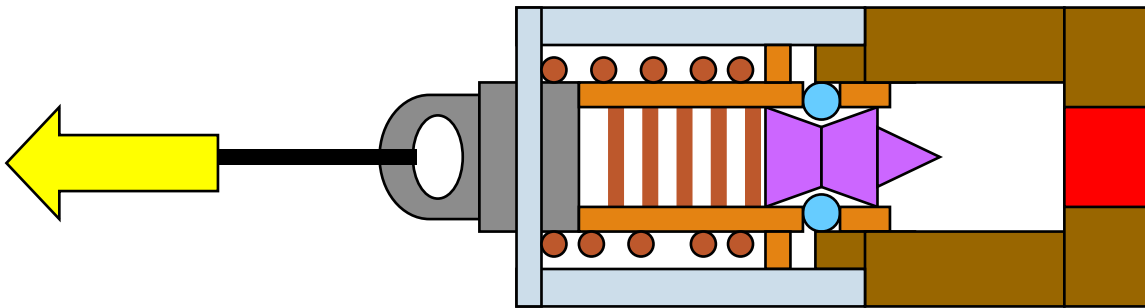


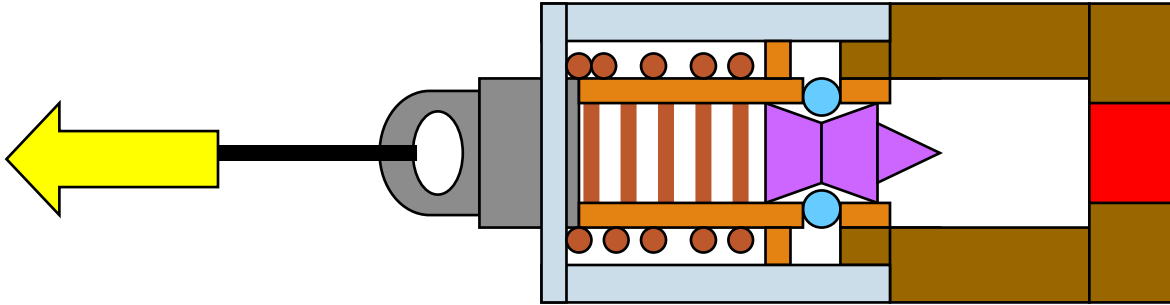
RELEASE OF LOCKING BALLS

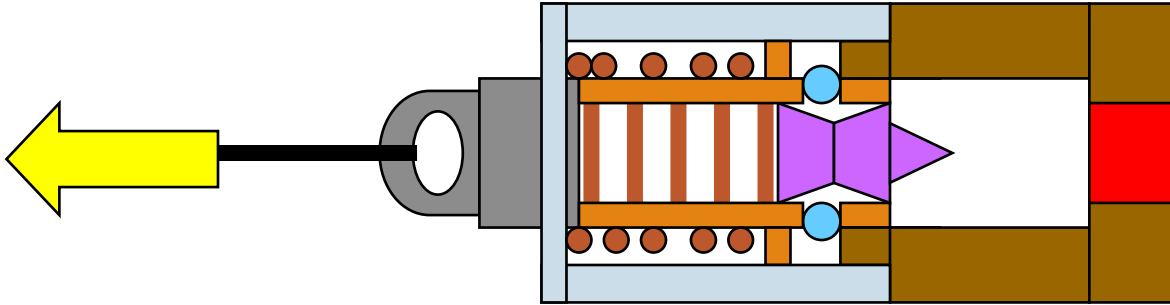
ECHAPPEMENT DE BILLES

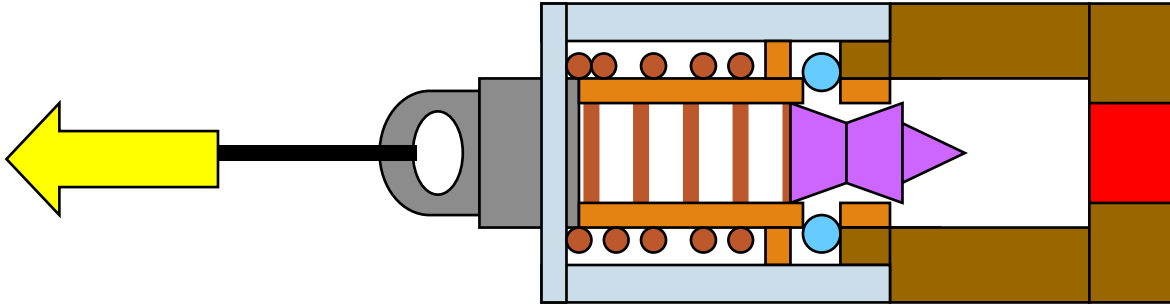


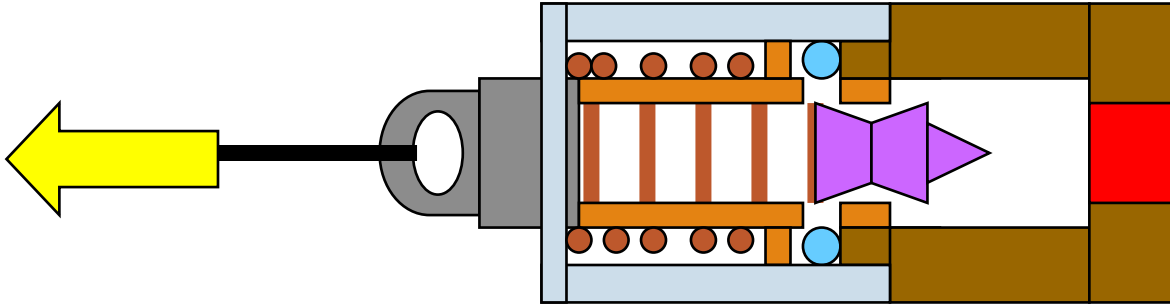


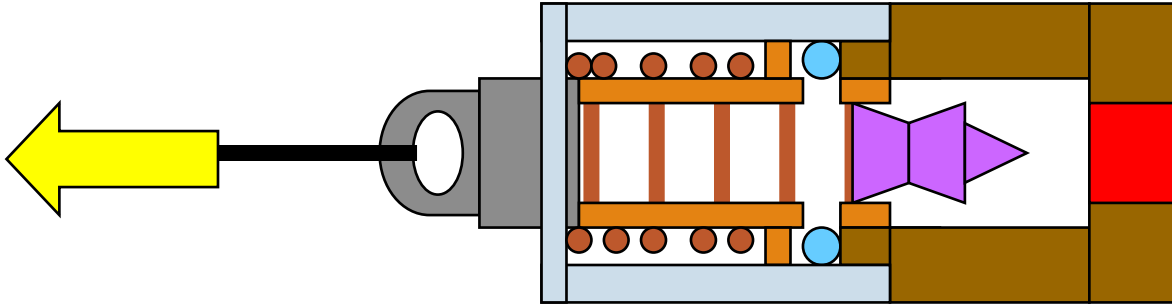


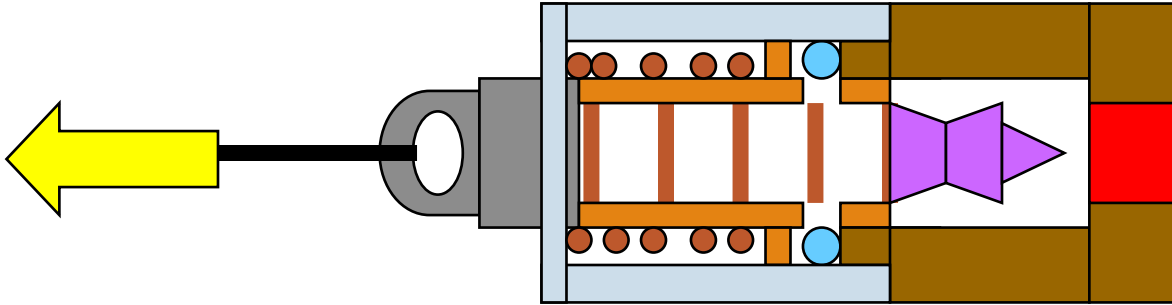


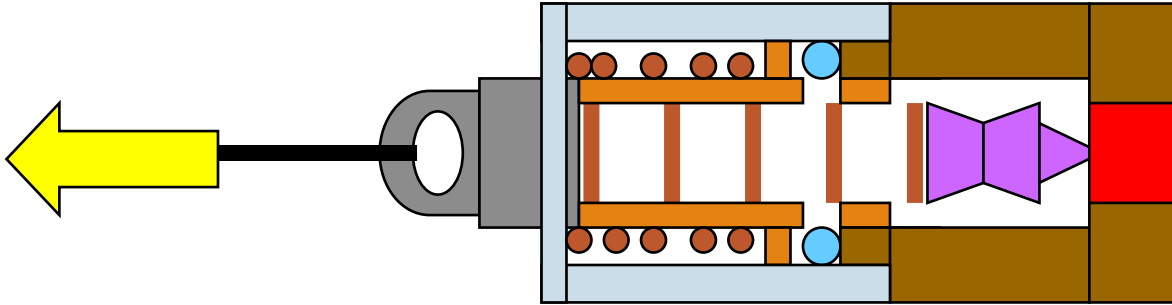


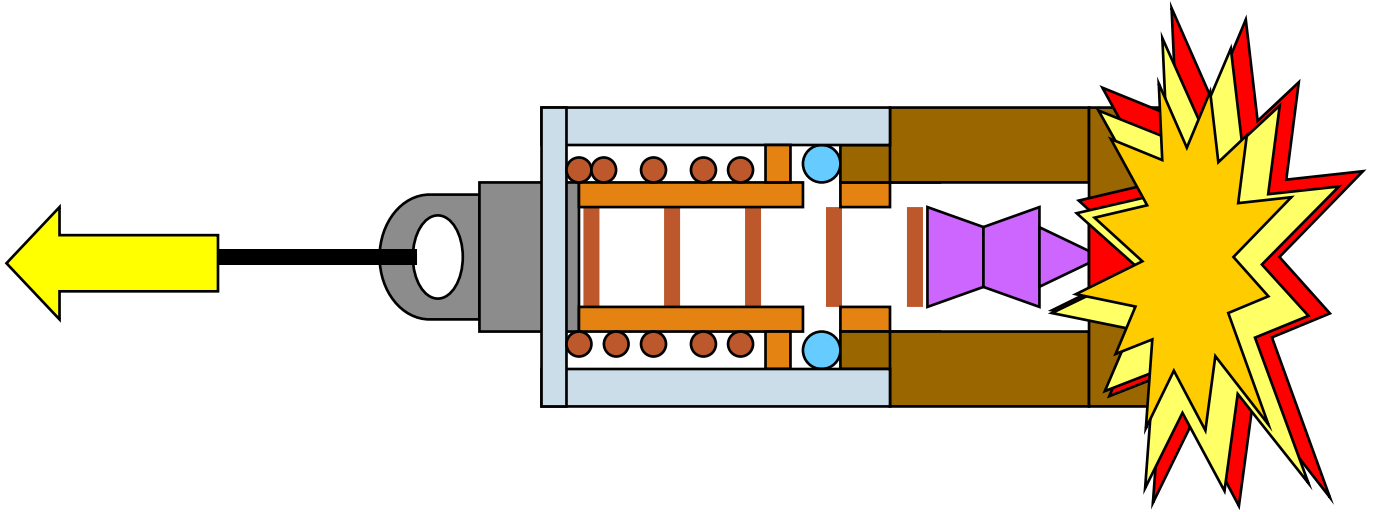


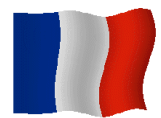
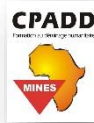






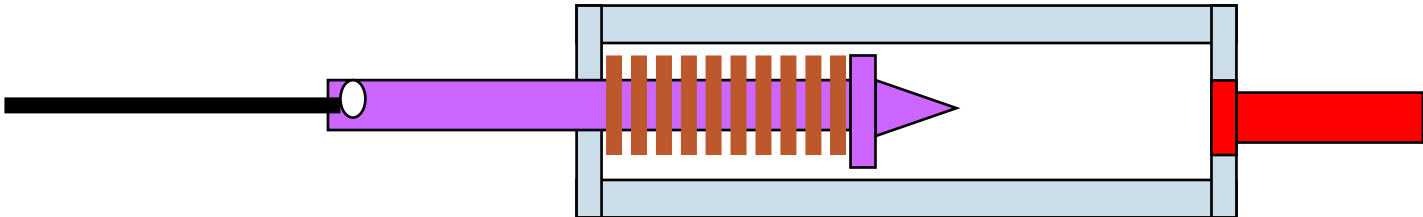


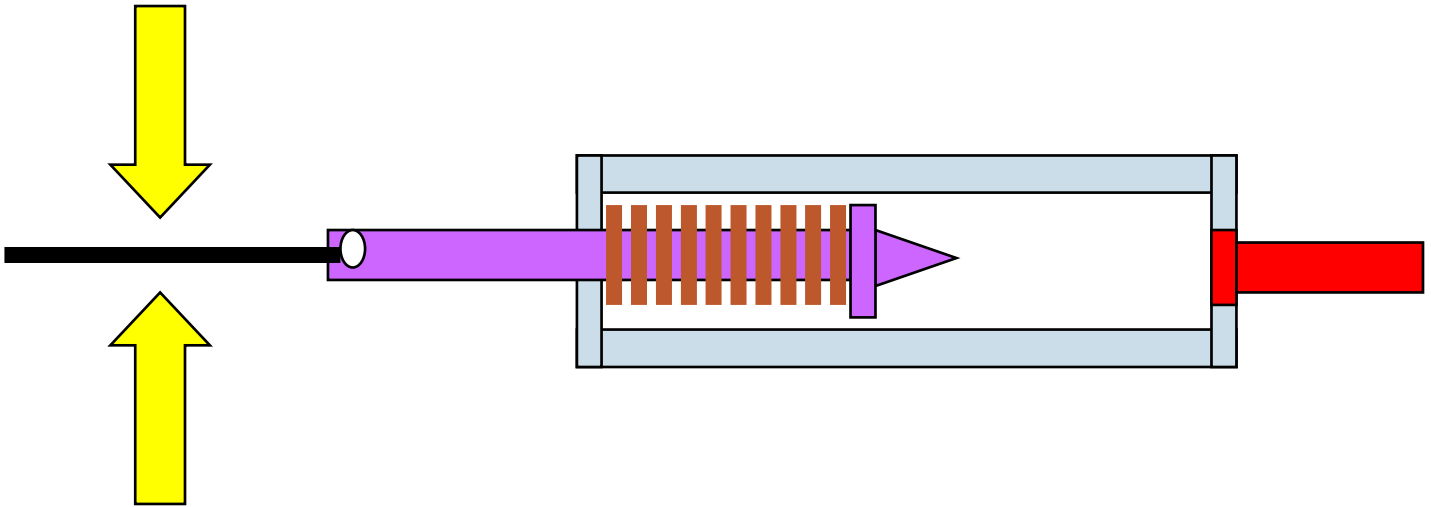


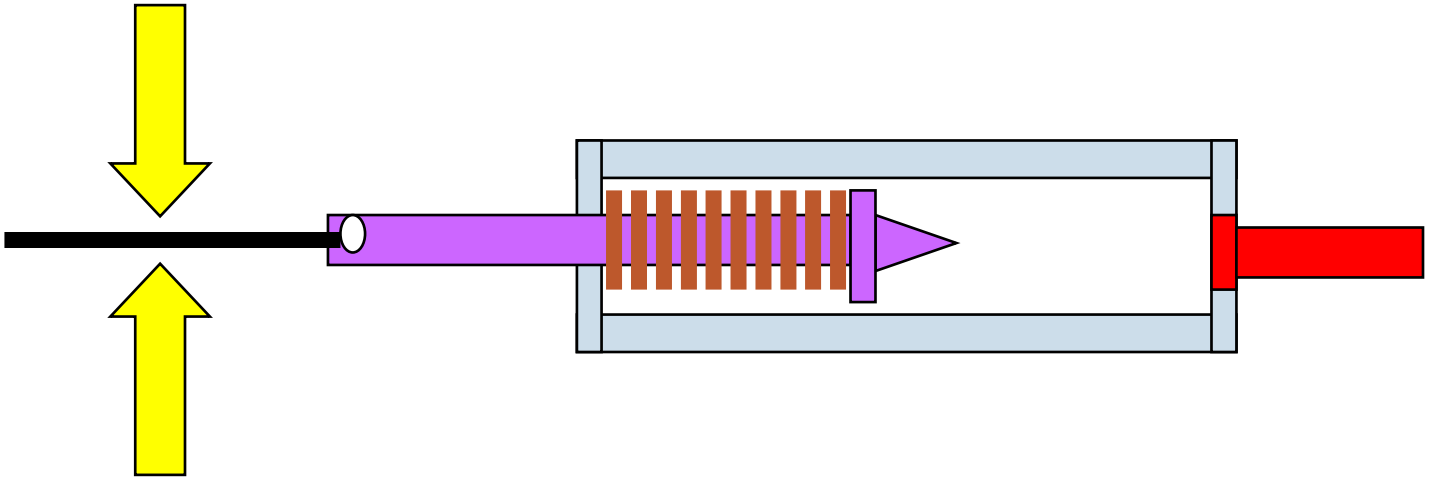


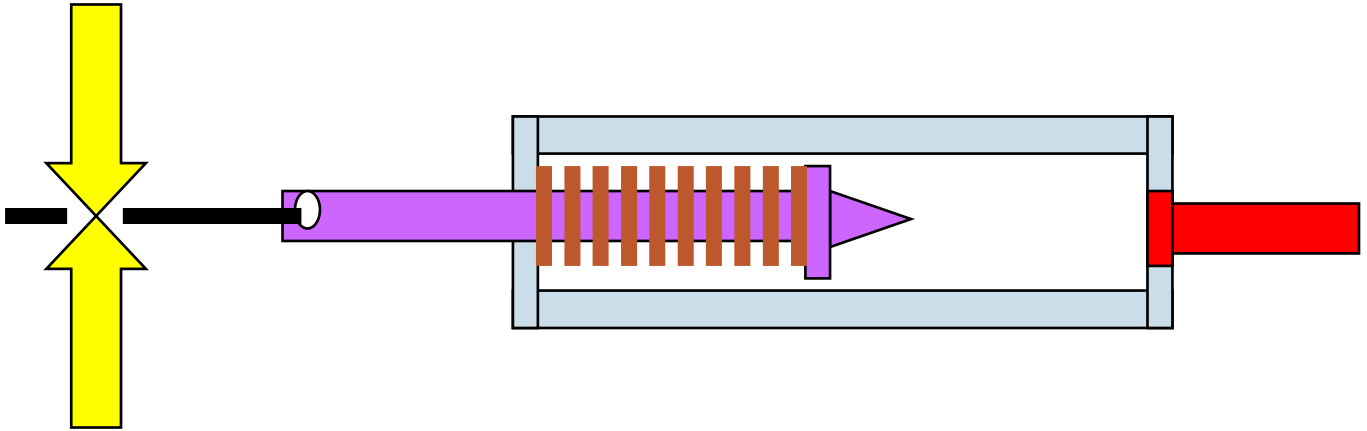
Dans ce système, le percuteur est simplement retenu par un fil tendu.

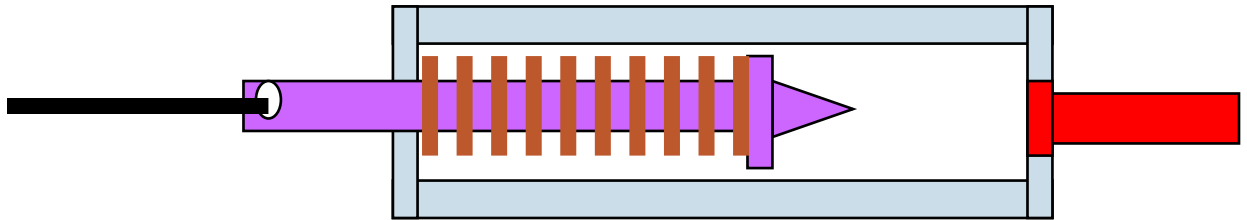
Le relâchement de la tension ou la rupture du fil provoque le fonctionnement de l'allumeur.

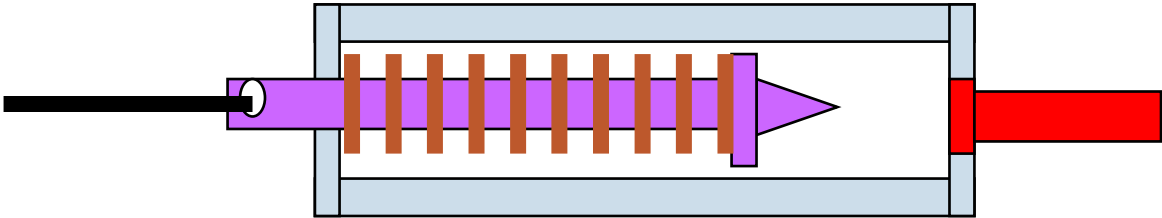


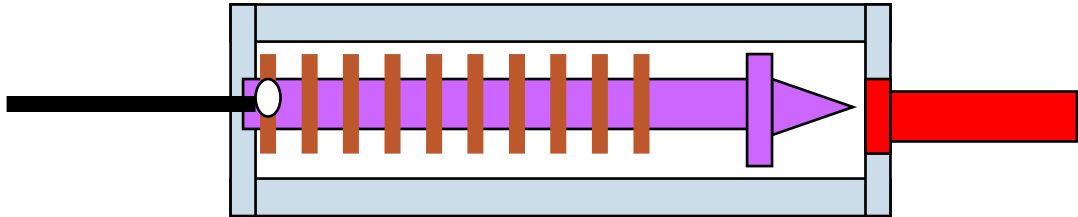


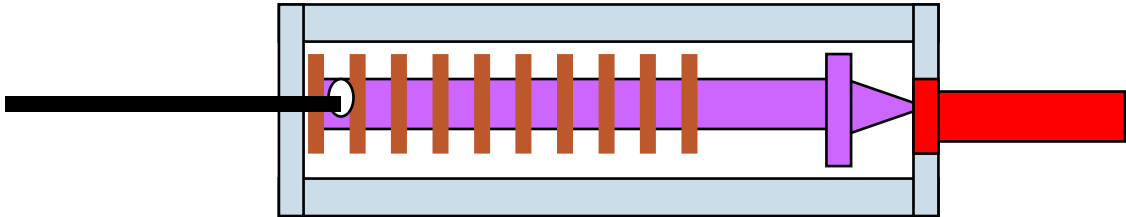


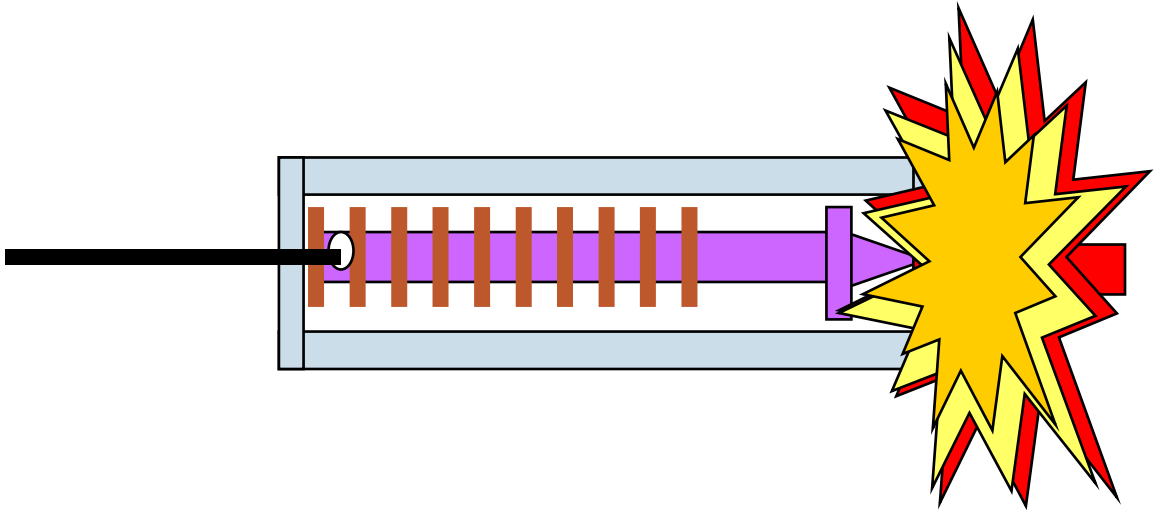


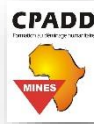






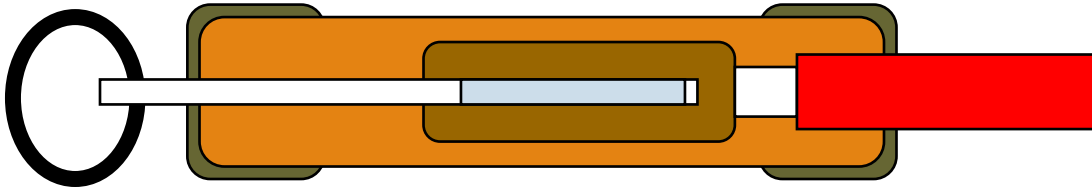


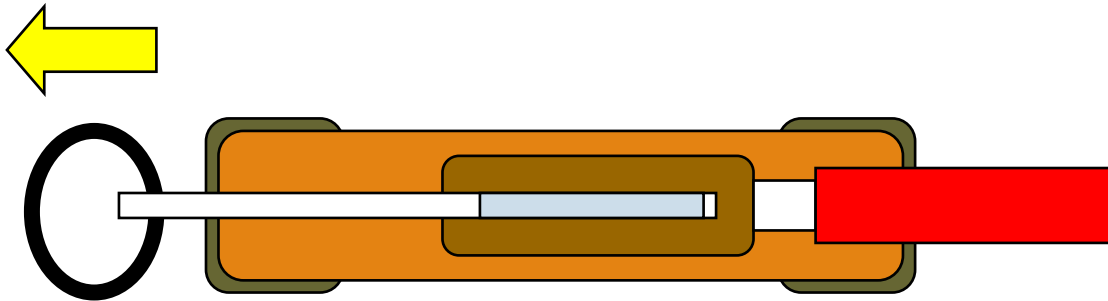


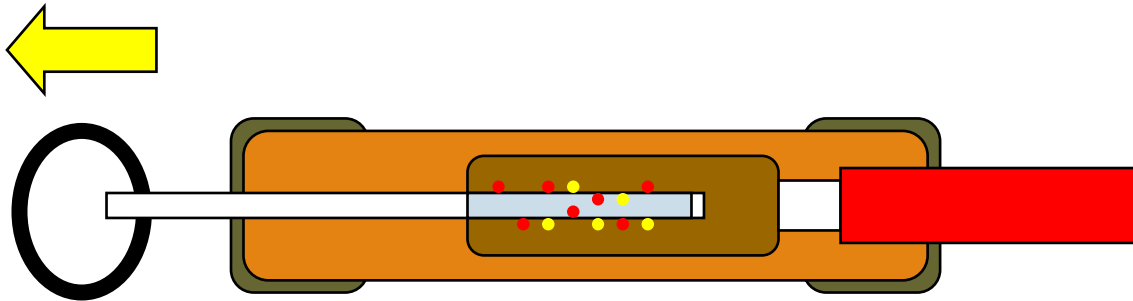


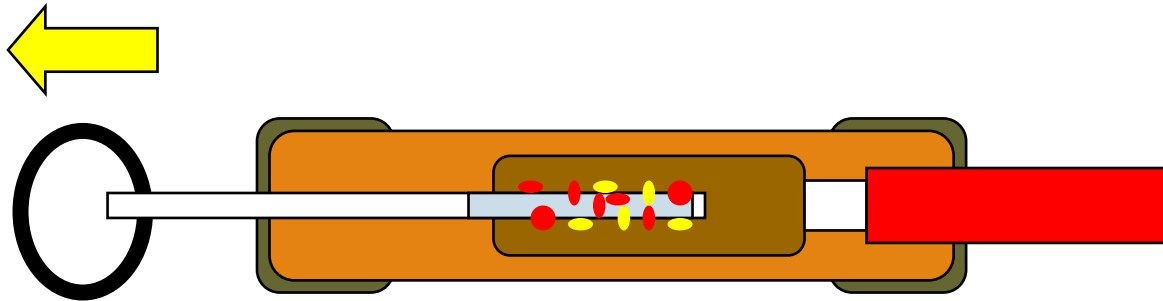
WITHOUT STRIKER OR CAP

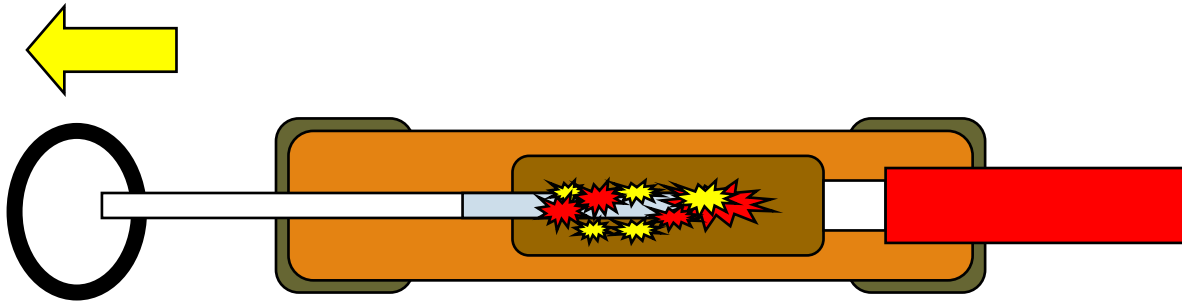
SANS PERCUTEUR (RUGUEUX)

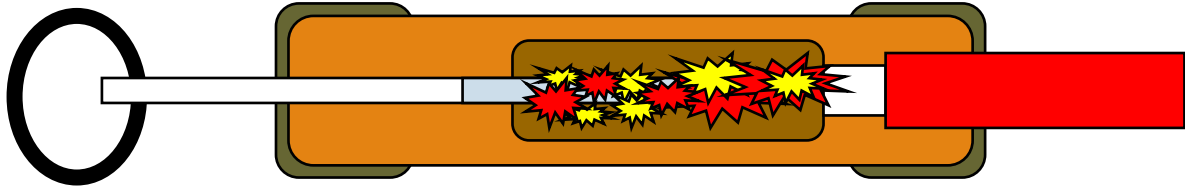


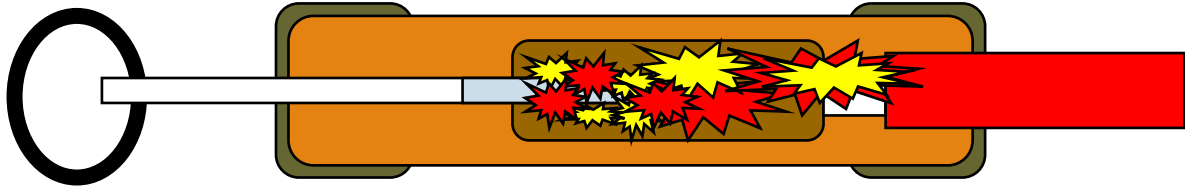


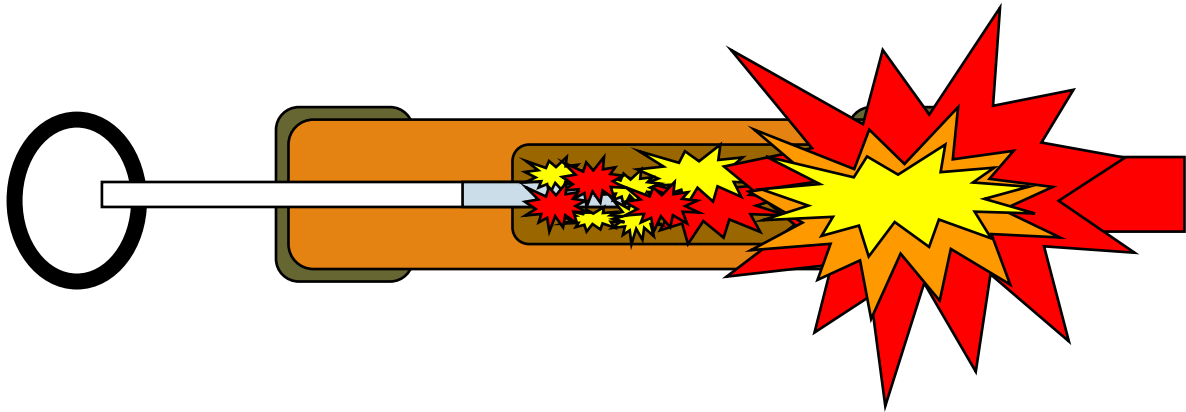


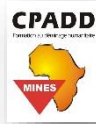




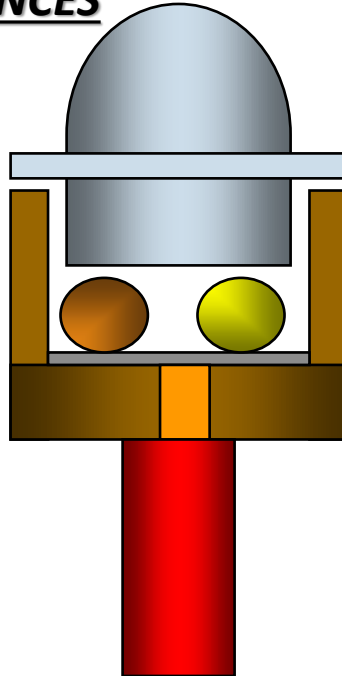


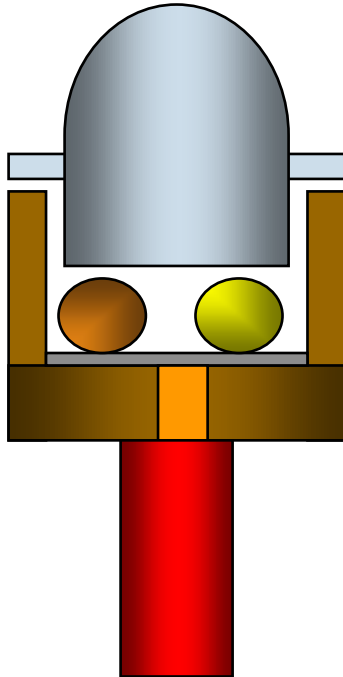


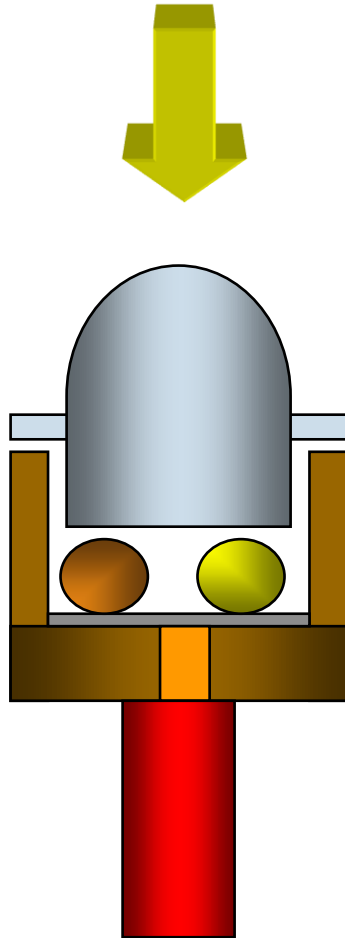


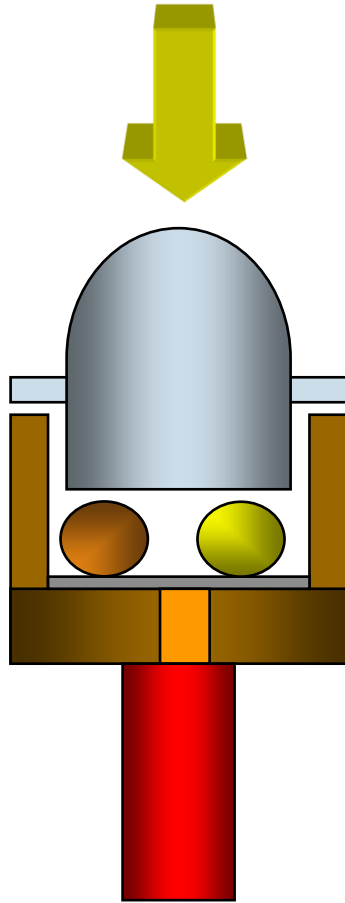


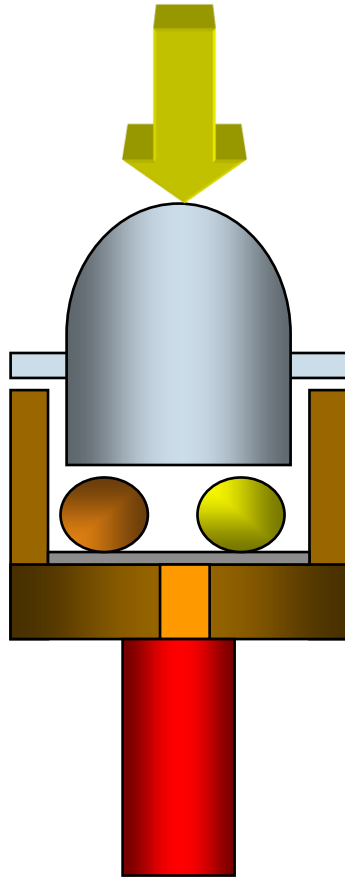
MIX OFF TWO SUBSTANCES
MELANGE DE DEUX SUBSTANCES

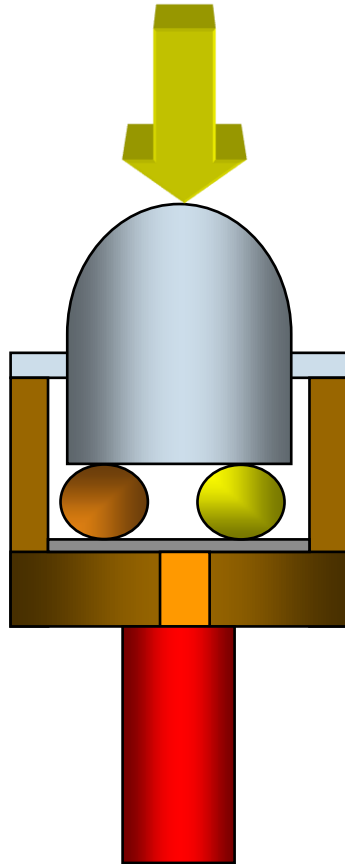


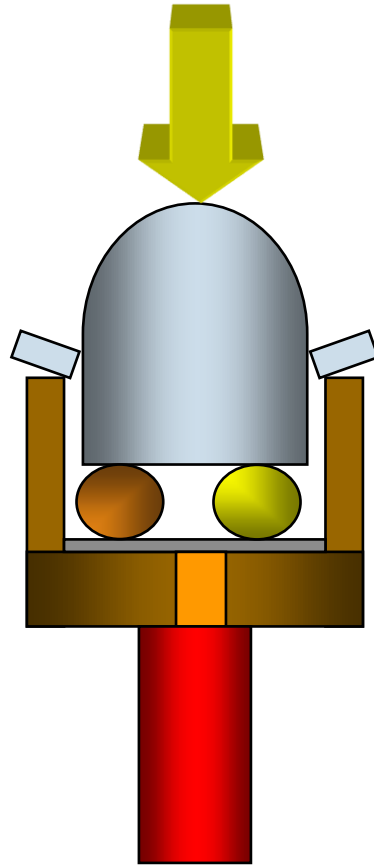


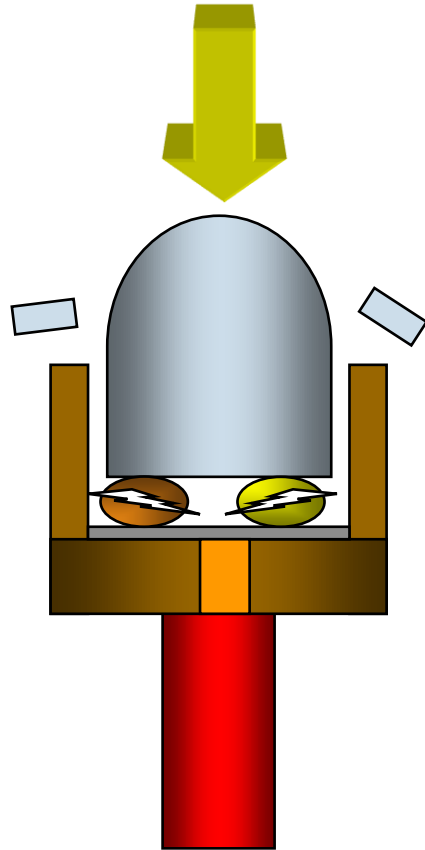


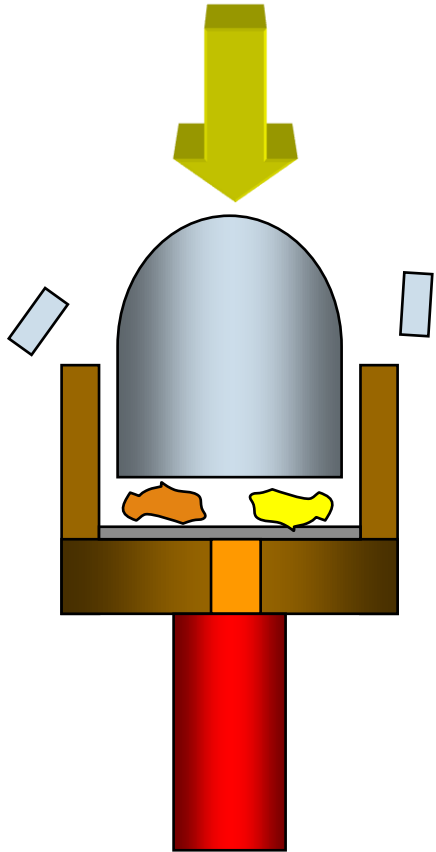


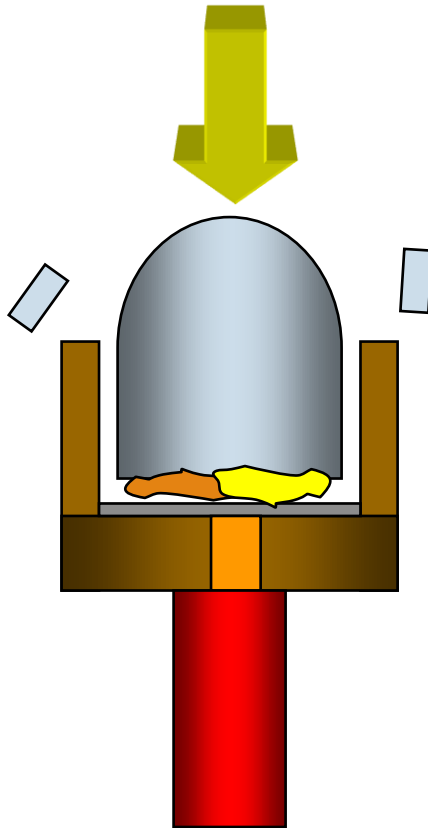


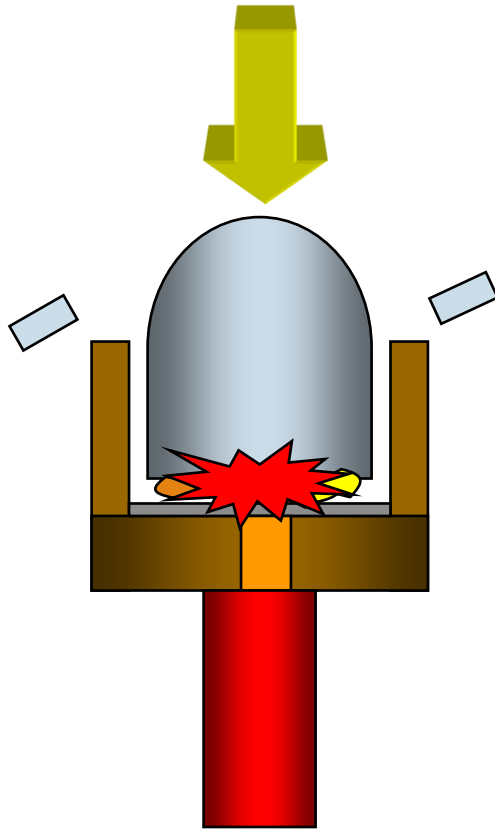


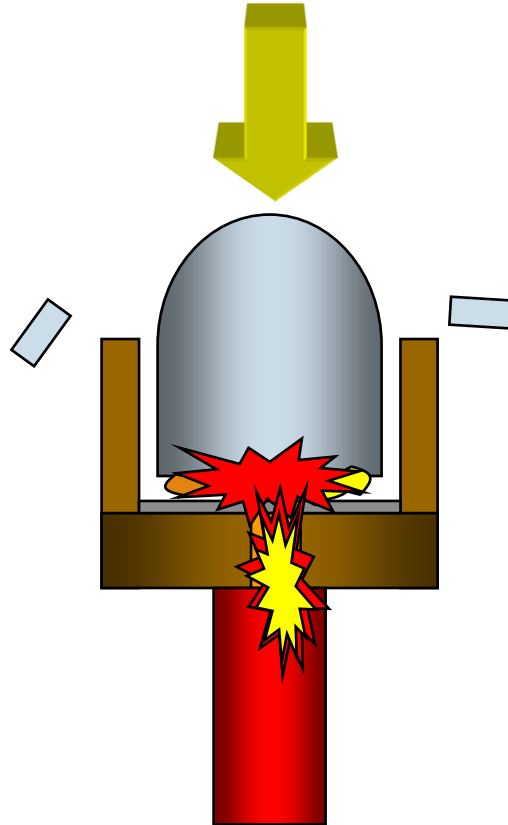


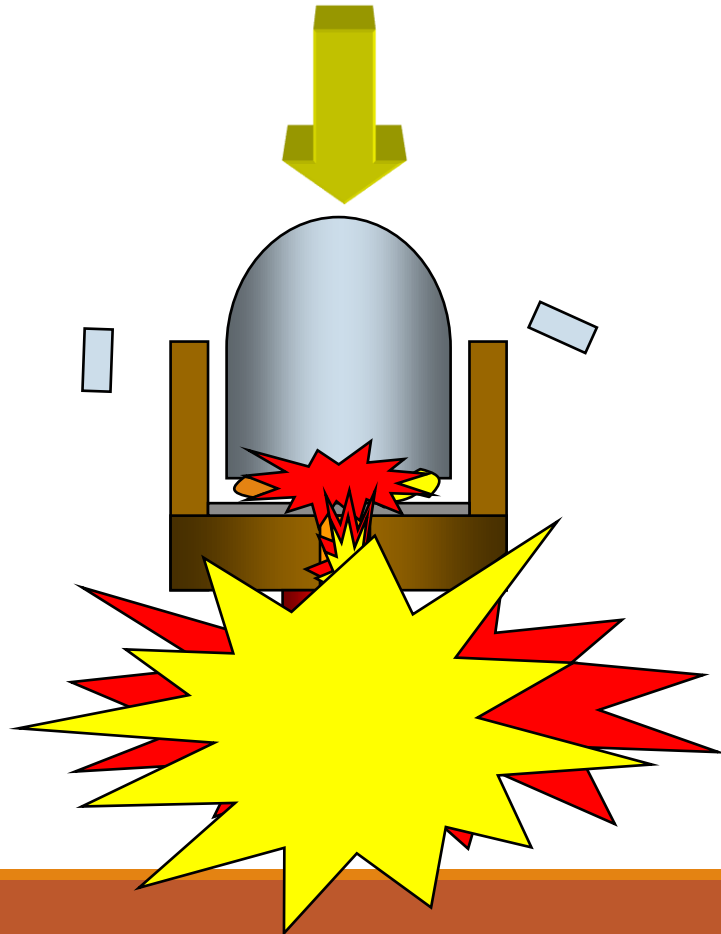




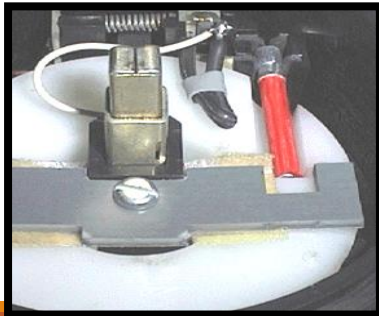
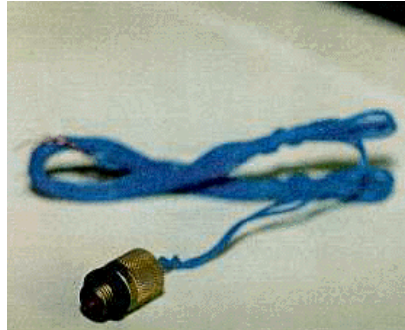


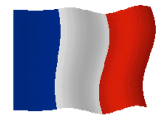
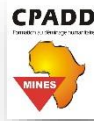






ELECTRICAL FUZES





II. ALTERNATIVES TO ACTIVE AP MINES USE

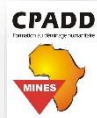
REMINDER

Article 3

Exceptions 1.

Notwithstanding the general obligations under article 1, the retention or transfer of a number of anti-personnel mines for the development of and training in mine detection, mine clearance, or mine destruction techniques is permitted.

The amount of such mines shall not exceed the minimum number absolutely necessary for the abovementioned purposes.

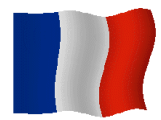
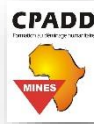


II. ALTERNATIVES TO ACTIVE AP MINES USE

4. How do we proceed?

1. The mine action environment
2. General information on mines
3. Operating principles
4. Neutralization and destruction (theory + practice)
5. Evaluation



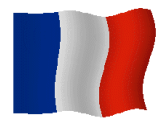
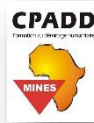


II. ALTERNATIVES TO ACTIVE AP MINES USE

KEY POINTS

1. Color codes: yellow – orange - blue
2. Levels of training (IMAS 09-30)
3. NTS and TS: methods and means to be used





II. ALTERNATIVES TO ACTIVE AP MINES USE

1. Demilitarized mines

Lead looks exactly like the real thing

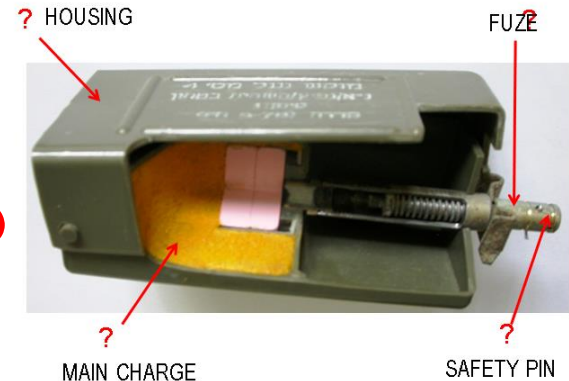
- Same color
- Same marking code
- Same appearance

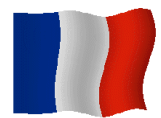
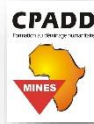
Absence of explosive chain and any active material (which will affect the weight of the ammunition)

FFE (free from explosive) certificate and

FFE marking on the ammunition.

DANGEROUS





II. ALTERNATIVES TO ACTIVE AP MINES USE

2. Replica mines or models

Lead looks exactly like the real thing
Same color

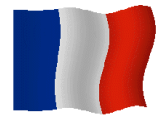
- Same marking code
- Same appearance
- Same weight

No explosive chain

Possibility of handling ammunition (e.g. neutralization)

Need for "INERT" marking on the replica



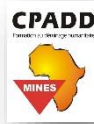


II. ALTERNATIVES TO ACTIVE AP MINES USE

3. Exercise or simulation mines

- Contain active material (smoke) or a sound element
- Requires a certain level of technical skill to use
- Generally used to simulate practical situations (mine accidents, minefields, etc.).





SUGGESTIONS

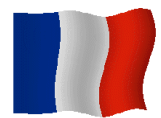
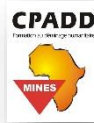
Retention of AP mines for training purposes is no longer necessary.

ALTERNATIVE SOLUTIONS

- ❑ Encourage States to acquire demountable inert mines ;

[Anti-Personnel Landmine Kit - Inert Replicas - Inert Products LLC](#)

- ❑ Set up a fund at Convention level to provide States with inert and/or exercise AP mines to replace their stockpiling, in line with the exception of Article 3 of the APMBC.



Conclusion

The exception in article 3 authorizing the possession of mines for training or technical development purposes has already enabled the industry to develop effective, realistic solutions for training technicians in AP mine neutralization and destruction techniques. With inert mines, the gestures for handling the mines are the same as those established for real mines. Exercise mines enable the learner to learn from real-life situations and become aware of his or her mistakes.

It is forbidden to use equipment containing active material in a training room. Teaching aids must be designed in such a way as to enable learners to perform certain actions (e.g. neutralization). Inert, FFE or EX markings should be visible to avoid confusion.

QUESTIONS ?

Sites : www.cpadd.org ou www.bibliomines.org
E-mail : info@cpadd.org