

## FIRE FIGHTERS GUIDANCE NOTE #1-7

### ISSUE:    ELECTRICAL EQUIPMENT AND CORDS

The Ontario Fire Service must work with electrical generators, tools, and cords. The majority of incidents (shocks, burns, electrocution) have occurred from improperly maintained tools and electrical cords. This Guidance Note, along with your department's own SOP/OG, will aid your department to help eliminate this problem.

Tools, lights and cords should be repaired and maintained to manufacturer's specifications.

Electrical cords with breaks, splits, cuts, and cracks in casing, should be repaired or removed from service.

- Electrical cords with damage to inner casings or wire should be replaced.
- Tools, lights and cords should be cleaned and inspected after use.
- Portable electrical lights should have a protective screen over bulb/glass area.
- New electrical cords should have dust and moisture resistant male/female ends.
- Cords or devices that have multiple male/female connections should be repaired with dust/moisture free ends or replaced with new cords or devices if one fails.
- Only three wire or double insulated tools, equipment or cords should be used.

The following chart can be referenced for proper cord size for job and distance:

**RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS \***

Length Amperes	25'	50'	75'	100'	150'	200'
0 – 5.0	16	16	16	14	14	12
5.1 – 8.0	16	16	14	12	10	-
8.1 – 12.0	14	12	10	-	-	-
12.1 – 15.0	12	12	10	-	-	-
15.1 – 20.0	10	10	10	-	-	-