

---

**Leading to Better Customer Satisfaction  
and Business Expansion**

---

**NEW CAPCO  
MT-10**

---

**Proposal of MT-10 Metal Treatment**

---

**CENTRAL** CENTRAL AUTOMOTIVE PRODUCTS LTD.

HEAD OFFICE 2-30, 4-Chome, Nakanoshima Kita-Ku, Osaka 530-0005, Japan  
TEL: 81-6-6443-5111 FAX: 81-6-6443-6161  
<http://www.central-auto.co.jp>

## Improvement of Oil Additives

### Oil Intensifying Additive

Additives intended to intensify or boost the performance of lubricating oil, viscosifier and detergent.

### Solid Lubricant

Solid friction reducing additives such as Molybdenum disulfide and PTFE to reduce metal friction.

### Metal Surface Conditioning Additive

Additives intended to reduce metal friction by initiating chemical reactions on metal surface.

Nowadays, the metal surface conditioning additive goes mainstream.

## Synthetic Metal Treatment

Metal Treatment MT-10 is designed to boost the lubricant performance by smoothing and sealing the metal surface.

MT-10 is an environmentally-friendly lubricant additive developed in the U.S.A.

### Protection of Your Beloved Automobile

MT-10 causes an electro-chemical reaction to take place upon the metal surface which develops an ionic bond with the low lying surface regions. Thus, by smoothing the metal surface, it can effectively protect your beloved automobile against friction and reduce engine wear due to Dry Start.

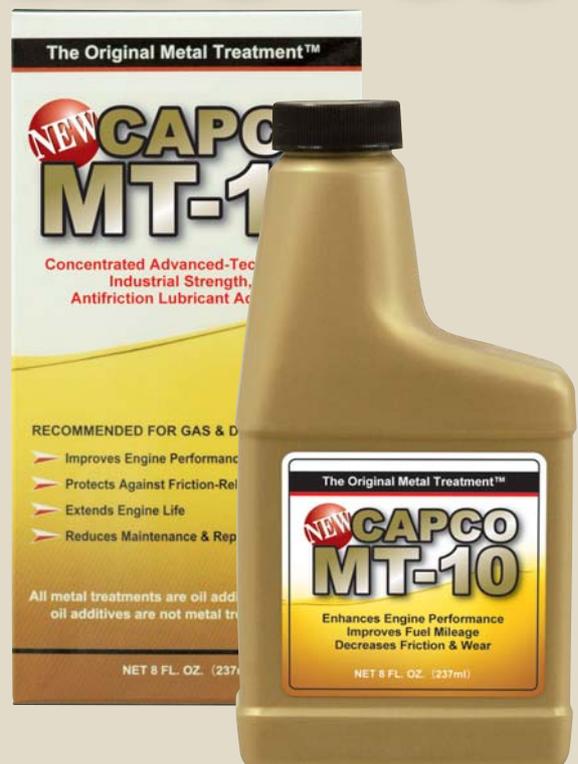
### Environmental Friendliness

MT-10 contains neither solid lubricants causing environmental problems nor any environmental pollutant prohibited by EPA of the U.S.A. It is friendly to both your beloved automobile and environment.

### Evaluated as High Reliability

Since MT-10 has been used for bearing lubrication under extreme conditions, such as Union Pacific Railroad and Norfolk Southern Railway, it was highly evaluated for its reliability.

# NEW CAPCO MT-10



## Long-lasting Lubrication! Low Cost! Power Up!

**1. Protects against Friction-Related Heat & Wear**

**2. Reduces Engine Wear Due to Dry Start**

**3. Extends Life & Tolerance of Lubricated Metal & Sealing Parts**

**4. Reduces Transmission Shock**

**5. Reduces Noise and Vibration...etc.**

**6. Outperforms Other Additives**

## Protection from Dry Start

After stopping for several hours, engine oil dripping gradually into oil pan and the engine of your automobile will be in a state of oil-lacking. Starting engine in such an oil-lacking state is called Dry Start.

Dry Start can cause damage to engine due to friction of metal surfaces. It has been one of the main reasons accounting for engine damage.

### How Does MT-10 Protect Engine from Dry Start?



Engine oil With MT-10



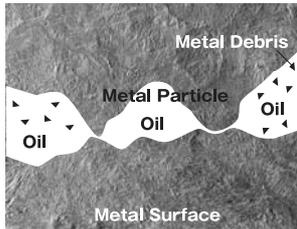
Engine Oil Only

The photos on the left show the bearing conditions after a comparison test on oil intolerance by Extreme Pressure Lubricant Tester.

Compared with the bearing lubricated only with engine oil, the bearing with MT-10 is of significant less damage.

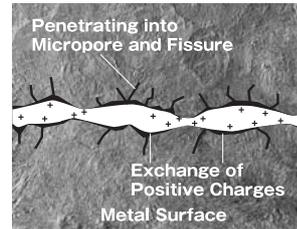
The conditions of the bearing can well explain the outstanding performance of MT-10.

## Before Addition-1



The metal surface in the micro world is bumpy with low lying and high lying surface regions and uneven with fissures. Frictions between metal parts will lead to metal wear and rupture.

## In Reaction



The smoothing process of MT-10 is not to chip away or peel off the surface, but to penetrate into the low lying and high lying regions and fissures. The chloride component of MT-10 will gradually hookup with metal atom and form a stable ionic bond.

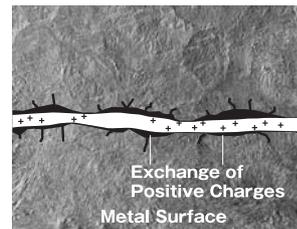
## Before Addition-2



Friction between metals causes electrification, which gives the high lying region (+) charges and the low lying region (-) charges.

According to Faraday's Law, Unlike Charges Attracts, which results in much more friction and wear.

## After Reaction



The metal surface becomes smooth with the formation of the ionic bond. Repulsion between charges of the same (+) charges will furthermore reduce friction and wear.

# Merit from the Use of MT-10

## Merit to Users

### 1. Protection of Users' Beloved Automobile

- As new engines need a small amount of wear to seat rings properly, addition of MT-10 on purchase of new vehicle will smooth such process and maintain vehicles' performance.
- MT-10 protects engine from Dry Start, which is said to be one of the main reasons accounting for engine wear.
- MT-10 reduces damage to engine when starting up in cold seasons.

### 2. Meeting Users' Needs

- Together with the extended life of automobile, more and more people want to drive his or her vehicle for a longer time through careful driving.
- Users pay more attention to economic car life. MT-10 realizes cost down and power up.
- MT-10 is environmentally friendly without containing any PTFE, silicone, graphite, moly or solid lubricants.

## Merit to Dealers

### 1. Customer Satisfaction

- Achieves higher levels of customer satisfaction because MT-10 meets their needs.
- Reliability and good image for MT-10's high performance

### 2. Creating Needs & Expanding Profit Margins

- MT-10 can be applied widely without limitation of car model and mileage. Therefore, it has a large market.
- MT-10 is an optimal product for sale together with engine oil.



**Engine Bearings**



**Cylinder Liner before Addition of MT-10**



**Cylinder Liner after Addition of MT-10**

The following are questions and answers from our customers on the Synthetic Metal Treatment MT-10.

### **Q1. Can MT-10 protect engine from damage due to Dry Start?**

A1. The ionic bond resulting from chemical reaction as explained will boost the lubricant performance.

Therefore, MT-10 can dramatically protect engine from damage during Dry Start, a state to start the engine while all oil dripping into oil pan after stopping for a long time.

### **Q2. How is MT-10 different from other additives?**

A2. MT-10 does not contain any solid lubricants. It is not a reaction caused by MT-10 and oil itself, but a process of ionic bond formation upon sliding surfaces of metal parts. Other additives containing solid lubricants will possibly cause clogging of oil line after long time of period or carbonization of over-heated parts. As for MT-10, such trouble will not happen.

### **Q3. When can I add MT-10? Must MT-10 be added when changing engine oil?**

A3. It is common for many additives to be refilled together with changing engine oil. MT-10 is a kind of metal conditioning additive which caused chemical reaction upon metal surface. A distance of 100 km is enough for MT-10 to take effect. You can fill in MT-10 without changing engine oil.

### **Q4. Does MT-10 have an immediate effect?**

A4. MT-10's effect will not act directly right away after fill-in. It will gradually improve the metal surface and come into full effect after a total mileage of 100 km. Its effect will last a long time and we recommend you to refill MT-10 after 20000 km.