

TO: SERVICE MANAGER  MECHANICS   
PARTS MANAGER

91-26

## A. BRAVO CONE CLUTCH

### Models

MCM Bravo One - Serial Number 0D578821 and below.

MCM Bravo Two - Serial Number 0D579009 and below.

### Problem

The (three groove) style cone clutch on some performance type boats would come out of gear when operated in rough water at high speeds, when the boat left the water (went airborne), and the throttle was cut back as the boat reentered the water, the propeller would break the clutch loose. At this point the oil grooves that go around the cone would trap oil and cause the clutch slippage. The new (six groove) clutch gets rid of the oil via the additional three drain grooves that go straight up and down across the oil grooves. With the total of six grooves the oil is relieved twice as fast and prevents clutch slippage.

### Change

The Bravo cone clutch has been changed from a (three groove) style to a (six groove) style. Replacement clutches include two new springs that must be installed along with the cone clutch. This is necessary because of a depth change to the spring socket on the new clutch. The socket is deeper and the springs are larger in diameter.

Starting Serial Number for When the New Clutch and Springs were Installed in Production

Bravo One – 0D578822

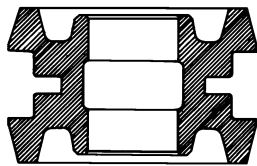
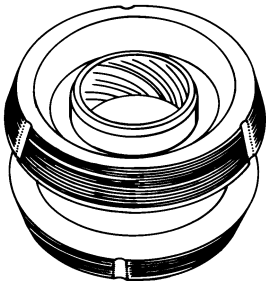
Bravo Two – 0D579010

### When to Change Clutch

The cone clutch only needs to be changed out when a slippage problem occurs. This will only likely happen on the HI-PERFORMANCE type boats. The type that leaves and reenters the surface of the water, like wave jumping, rough water usage, etc., and with with big cubic inch high horse power engines.

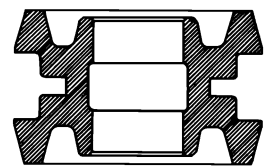
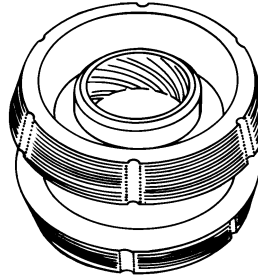
### Parts

When ordering a replacement cone clutch assembly order P/N 52-12719A5.



71232

**Three Groove Clutch**



71231

**Six Groove Clutch**