ESY

Windshield Wiper Motors

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Issued 3/16/78

VOLTS 12

BRUSHES :

**INFORMATION** 

POLES

2

ROTATION

Motor rotates clockwise at drive end. Crank arm rotates counterclockwise. Reverse rotations to park.

BEARINGS

Absorbent bronze.

LUBRICATION

At overhaul, saturate the felt oiling pads around the armature shaft bearings with SAE 20 oil. Drain off excess oil. Apply a thin film of grease to the crank arm shaft before assembly. Fill gear chamber 3/4 full with a good grade gear grease.

END PLAY

.005" maximum. Adjust by turning adjusting screw in or out as required. Replace the adjusting screw if the nylon lock becomes worn so that it will not hold the setting.

FIELD COIL DRAW

 $(70^{\circ}F.)$  1.8 to 2 amperes at 12.0 volts. (Shunt field only)

NO LOAD DRAW

(70°F.) 2.6 maximum amperes at 12.0 volts. (Low speed operation)

TEST CONNECTIONS

LOW SPEED

Connect battery positive to black and red leads. Connect battery negative to yellow lead and motor frame.

HIGH SPEED

Same connections as low speed, except add a 14 ohm resistor between the black lead and the red lead.

PARK

Connect battery positive to blue lead. Connect black lead to yellow lead. Connect battery negative to red lead and motor frame.

PARKING ADJUSTMENT

Have motor cold and test with a load on the crank arm. Adjust to parking angle shown in tabulation by moving the switch plate adjustment. Final adjustment should be made after installation using a wet windshield.

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Unit	Parking Angle
TOY /001	
ESY-4001	A
ESY-4002,A,AS,B	В
ESY-4003,A	A
ESY-4004	В
ESY-4005	A
ESY-4006	° C
ESY-4006A	D
ESY-4006B,C	E
ESY-4007	D

## PARKING ANGLE

- Crank arm should be pointing inward  $7^{\circ} \pm 5^{\circ}$  after passing a line parallel to Α. the motor centerline.
- В. Crank arm should be pointing inward 130 ± 50 after passing a line parallel to the motor centerline.
- Crank arm should be pointing directly inward  $\frac{1}{2}$  5° on a line parallel to the C. motor centerline.
- D. Crank arm should be pointing inward  $16^{\circ} \pm 5^{\circ}$  before passing a line parallel to the motor centerline.
- Crank arm should be pointing inward  $10^{\circ} \pm 5^{\circ}$  after passing a line parallel to E. the motor centerline.

