



### *Refer to parts breakdown drawing*

- 1) Drain oil from gear case.
- 2) Remove cover ( Ref. 13 ) from gear case ( Ref. 11 ).
- 3) Remove motor ( Ref. 2 ) from planetary gear box ( Ref. 8 ).
- 4) Carefully remove planetary gear box ( Ref. 8 ) from gear case ( Ref. 11 ).
- 5) Remove retaining ring ( Ref. 12 ) from drive shaft adapter ( Ref. 9 ).
- 6) Remove drive shaft ( Ref. 24 ) and drive shaft adapter ( Ref. 9 ) assembly from gear case ( Ref. 11 ).
- 7) Carefully remove retaining ring ( Ref. 23 ) from drive shaft ( Ref. 24 ) and press drive shaft adapter ( Ref. 9 ) from drive shaft.
- 8) Remove keys ( Ref. 25 ) from drive shaft ( Ref. 24 ).
- 9) Remove ball bearings ( Ref. 10 ) from gear case ( Ref. 11 ).

### *Refer to parts breakdown drawing*

- 1) Clean gear case and all parts thoroughly, inspect all parts and replace if worn or scored.
- 2) Install ball bearings ( Ref. 10 ) into gear case ( Ref. 11 ).
- 3) Carefully press drive shaft adapter ( Ref. 9 ), keys ( Ref. 25 ) onto drive shaft ( Ref. 24 ) and install retaining ring ( Ref. 23 ) onto drive shaft ( Ref. 24 ), then install drive shaft adapter & drive shaft assembly into gear case ( Ref. 11 ) and install retaining ring ( Ref. 12 ).
- 4) Use silicon ( form a gasket ) onto gear case ( planetary gear box side ) ( Ref. 11 ). Align timing mark on planetary gearbox with top-rib of the gear case or at two o'clock ( as shown on parts breakdown ).  
Then carefully install planetary gear box ( Ref. 8 ) onto gear case ( Ref. 11 ) with (12) 3/8"-24NF x 1-3/4" Hex Head Cap Screws ( Ref. 22 ) ( being sure tighten the screws evenly)
- 5) If removed, install oil seal ( Ref. 14 ) onto cover ( Ref. 14 ).
- 6) Use silicon ( form a gasket ) onto gear case ( Ref. 11 ) ( gear case cover side ).  
Then install cover ( Ref. 13 ) onto gear case ( Ref. 11 ) with (6) 3/8"-16UNC x 1" Socket Head Cap Screws ( Ref. 20 ). ( being sure tighten the screws evenly)
- 7) Use silicon ( form a gasket ) onto planetary gear box ( Ref. 8 ), then install motor ( Ref. 2 ) onto planetary gear box with (2) 1/2"-13UNC x 1-1/4" Socket Head Cap Screws ( Ref. 1 ).
- 8) If removed, align both ends of hydraulic tube ( Ref. 4 ) to the ports ( Ref. 5 & 26 if Sun valve installed ) ( Ref. 5 & 5 if Eaton valve installed ). Push hydraulic tube ( Ref. 4 ) into installed fitting body ( Ref. 5 & 26 or Ref. 5 & 5 ) on motor ( Ref. 2 ) and valve ( Ref. 6 ) until it stops. Fasten nuts and tapered split rings to fittings. Turn nuts hand tight, then with wrench tighten one turn or until rear of tapered split ring is flush with the nut. Do Not Overtighten
- 9) Fill gear box with (3) pints ( 1.4 liters ) Bloom ULLTRA-LUBE NO. 601 TRANS-WORM GEAR OIL.