DISASSEMBLY
The ATLAS N Scale FA-1 Diesel can be dismantled completely without the need for tools other than a small screwdriver except in the unlikely circumstance requiring truck replacement which entails unsoldering two connections per truck at the terminal board.

TRUCKS
Only limited truck disassembly is possible as certain truck elements (gearbox halves, worm, worm shaft, worm shaft bearings and electrical pick-up wheel wipers) are permanently assembled at the factory and cannot be individually replaced. With the exception of coupleur or truck frame replacement it is recommended that truck repairs not be attempted being more practical to replace the entire truck assembly.

Removal
1) Remove 410014 Body Shell by spreading sides just enough to release hidden latches located on each side just above the fuel tanks.
2) Unsolder wire connections at corners of 410013 Terminal Board. These are identified in Fig. 1 as A-B and C-D for the front and rear trucks respectively.
3) Grasp mainframe between thumb and forefinger placing thumb behind truck as shown in Fig. 2.
4) Swing truck down to position shown then press forward with thumb, direction of arrow, to disengage truck from pivot on mainframe. NOTE! Be careful to avoid loss of 410001 Male Universal which will be free to fall out when truck is removed.

Replacement
Make certain male universal is in place, line up slots on truck's female universal to receive pins on male then just snap the truck in place. No solder wires from truck to terminal board.

Truck Frame Replacement
1) Remove body shell as described in Step 1 above.
2) Disengage truck from chassis as described in Steps 3 & 4. Do not unsolder wire connections.
3) See truck assembly in Fig. 1 for location of inboard truck frame latch. Use small screwdriver to spring latch away from gearbox then swing frame upward. Latch at opposite (coupler) end will disengage allowing frame to be removed.
4) Insert inboard end of truck gear box down through top of new frame, engage latch at coupler end first then swing inboard latch into new frame downward and snap it into place.

MOTOR Removal
The FA-1 motor is equipped with special rotary brushes designed to last the life of the motor and are not replaceable. A worn out motor is quickly replaced as follows:
1) Loosen both 410010 Screws under fuel tank. The screws will remain in place by the rubber 410005 Saddles. Do not remove the screws.
2) Unsnap 410011 Terminal Board from 410001 Support at each end and then swing terminal board away to one side. Do not unsolder any wires.
3) Remove either truck as described above then lift motor out of male frame. Be careful not to lose two small 410001 Male Universal Shafts.

Replacement
1) Reposition male universal in truck that is still attached to mainframe then align slots in motor's female universal with male's pins then install motor and secure by tightening both 410010 Screws.
2) Install and align remaining male universal at motor's opposite end then snap truck back in place.
3) Swing terminal board back into position, align notches at ends with 410012 Supports and snap in place.

COUPLERS
CAUTION! When replacing damaged couplers use only the 410017 Coupler & Spring Set specified in Fig. 1. Couplers and springs used on other Atlas diesels may not work as freely because of slight dimensional differences. Also, be certain to install new coupler right side up. Once installed, a coupler cannot be removed except by clipping off its head.

Replacement
First, remove remaining Shank end of broken coupler by pushing it out of the opening on either side of the coupler pocket. Install new coupler as follows and as shown in Fig. 3.
1) Insert coupler spring through front opening of coupler pocket.
2) Insert rear end of coupler as shown keeping it over to one side as far as possible then snap remaining edge.

Lamp Replacement
1) Remove body shell as described above.
2) Disengage front end of 410013 Terminal Board from forward 410012 Support. Remove and replace lamp then snap terminal board back in place.