How to Drive Solenoids with the Arduino

Solenoid L1

D1 1N4001 or MUR340

Q1 TIP102 for solenoids up to about 4A

Notes:

-- you will most likely need a heat sink on the transistor.
-- This diagram is for DC solenoids rated up to about 24W: i.e. 12V@2A, 6V@4A, 24V@1A etc.
-- The protection diode should preferably be a schottky type, which has better response times. Something like a MUR340 is good for loads up to 3A.